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ABSTRACT

This "final review draft" report provides an overview of the Bureau of Indian Affairs (BIA) elementary and secondary school system, and focuses on broad policy questions affecting the entire system. Part I outlines the history of Indian education and describes the state of BIA education today, including enrollment trends, descriptions of facilities, teachers, curriculum, and extracurricular activities at 28 selected schools, statistical breakdowns of student performance in 1986 on nationally standardized tests, funding and budget figures, and family background and high school performance of Indian students. Part II addresses the long-range future of BIA education, and raises some basic policy options concerning the management of BIA school facilities and the exercise of BIA educational leadership. The merits of these options depend in part on developing consensus as to the desired future of the BIA school program. Part III reviews recent research into the characteristics of effective schools, and suggests policy options that would apply the results of this research to BIA schools to improve the quality of teaching, curricula, and special programs. The final chapter proposes 15 short-term goals for revitalizing Indian education, goals which can serve as topics for tribal, public, and bureau discussions. The report includes 90 data tables and 46 references. A statement from the National Advisory Council on Indian Education, which cautions that reported Indian student test scores included special education students whereas reported non-Indian student test

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REPORT ON BIA EDUCATION

Excellence in Indian Education

Through the

Effective Schools Process

FINAL REVIEW DRAFT

Office of Indian Education Programs

Bureau of Indian Affairs

U.S. Department of the Interior

March 1988

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Preface

Congress has long sought a plan for the educational system of the Bureau of Indian Affairs (BIA). The BIA has also sought the development of an education plan, but shortages of staff resources and the complexities of preparing a plan have previously prevented much progress from being made. In 1986, BIA's Office of Indian Education Programs initiated a short-lived effort to draft a Comprehensive Education Plan (CEP) and Congress called for a CEP in the conference report for the 1987 Interior appropriations act. A Federal Register notice published in 1986 stated that the ranking of applications for new school construction would be deferred until a CEP had been developed. This policy reflected a belief that new schools should not be started as long as BIA education lacked a plan setting forth a framework for determining the actual need for new schools.

The completion of this Final Review Draft of a *Report on BIA Education* represents a new effort to prepare a CEP. However, this report is not given the title of a comprehensive education plan, or "CEP," because it does not attempt to plan comprehensively or answer all the future questions that may be important to the future of Indian students attending BIA schools. This report does not, for example, attempt to identify proposed new schools that should be built. It also does not specify existing schools that should be consolidated. Rather, the report focuses on broader policy questions affecting all of BIA education. It seeks to provide information and to present options for review that will facilitate the resolution of these broader issues. Such a resolution requires informed participation and the combined efforts of BIA leadership, tribal leadership, educators, school boards, teachers, parents of school children, and other involved parties.

A BIA sponsored plan that sought comprehensively to answer all questions about the future of BIA schools and education programs would be both technically infeasible and politically unrealistic. Among its major problems, such a plan would be inconsistent with a policy of tribal self-determination. Further, most students of planning agree that planning at the national level should have a broad policy orientation, in order to facilitate subsequent decisions to refine the plan and to allow ample latitude for implementation of the plan at the local level.

This Final Review Draft contains options for future policy redirections in many areas of broad importance throughout the BIA elementary and secondary school system. (Postsecondary education is not included in this report.) A few of the options ad-

dress basic structural changes in the role of BIA education but most are concerned with less drastic steps that might be taken to revitalize and improve BIA education.

The report is divided into three main parts. The first part gives information on the state of BIA education today. This information is intended to serve as background and to provide a framework for considering later policy options. The second part of the report addresses the long range future of BIA education. It also raises some basic policy options with respect to the management of BIA school facilities and the exercise of BIA educational leadership--options whose merits depend in part on developing consensus as to the desired future of the BIA school program. The third part of the report describes the results of recent research into the characteristics of effective schools. The report then raises a number of options concerning the application of current research results to BIA schools. The options include possible ways to improve the quality of teaching, the curriculum and the special programs offered by BIA schools. The final chapter proposes a set of goals to guide the near-term process of building effective BIA schools.

This Final Review Draft is being circulated to a wide range of potential commenters including Indian tribes, Congress, school boards, educators, parents of BIA school children, local BIA administrators and teachers, and other potentially interested parties. All these parties are requested to submit any comments they may have on the analytical and statistical information contained in this Final Review Draft, additional options that might be raised, and the relative merits of the options under consideration. After allowing sufficient time for the submission of reviewer comments, the BIA will assess which, if any, options it believes merit immediate adoption, as well as identifying other options that may bear further study and scrutiny. Attractive new options suggested by commenters on this draft will be incorporated in the Final Report. The analytical and background information will also be revised, as may be needed, to reflect new facts and concepts brought to light by reviewers.

Accompanying the Final Report will be a statement of policy decisions and program actions to be taken. The BIA is committed to take those measures that this planning process shows are needed to make significant improvements in the system of BIA education. Some of these measures may involve incremental steps that can be implemented quickly, while other steps may involve more basic changes in BIA policy and organization.

Many of the study's findings suggest change and the majority of these changes will occur as part of the normal administration of BIA's Office of Indian Education Programs. Any additional budgetary resources that might be needed will be included in the normal budget formulation and appropriation process.

This Final Review Draft was produced by and under the direction of the BIA's Office of Indian Education Programs within the Department of the Interior. The preparation of the draft report was undertaken at the direction of Ronal Eden, former Acting Director of the Office of Indian Education Programs. The project director

for the preparation of the Final Review Draft was Robert Nelson of the Department's Office of Policy Analysis. Mary Ann Widenhouse coordinated the preparation of the draft for the Office of Indian Education Programs (OIEP). Robert Stearns of OIEP was assigned full time to assist in the research and writing of the report. Other representatives from the Bureau of Indian Affairs; Office of the Assistant Secretary for Policy, Budget, and Administration; and the Office of Indian Education of the U.S. Department of Education provided information for and comment on this Final Review Draft. Department of the Interior and Department of Education staff who made contributions to this Final Review Draft included Oliver Abrams (Department of Education), Glenn Allison (Office of Construction Management), Walter Cruickshank (Office of Policy Analysis), Joe Herrin (Office of Indian Education Programs), Elizabeth Holmgren (Office of Indian Education Programs), Jana Luken (Office of Policy Analysis), William Mehojah (Office of Indian Education Programs), Kenneth Reinfeld (Office of Policy Analysis), and William Sinclair (Office of Budget).

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Summary

The history of Indian education is older than the history of the Bureau of Indian Affairs (BIA) and of the arrival of the first Europeans on the continent. Not until 1794 was the first treaty signed specifically calling for efforts by the Federal government to educate Indian children. Subsequent changes in Indian education mirrored the changing policies of the Federal government with respect to the future of Indians in American life. Throughout the 19th century, the goal of the government was the full assimilation of Indian children into American society and the eradication of Indian culture. Boarding schools were created and other educational policies adopted as part of this broader policy of the Federal government.

In the 1920s, however, attitudes began to shift toward a more favorable view of cultural pluralism throughout American society. These changes were reflected in a dramatic turnabout in Indian policy, embodied in the Indian Reorganization Act of 1934. As part of this policy shift, the Federal government introduced the teaching of Indian history and culture, more reliance on day schools instead of boarding schools, and other new educational measures.

Following World War II, there was a temporary reversion to the old assimilationist philosophy. But since the 1960s, the Federal government has adopted a policy of Indian self-determination. This policy was applied in a new legislative framework for Indian education built by Congress in the 1970s (Indian Education Act of 1972; Indian Self-Determination and Education Assistance Act of 1975; and Title XI of the Education Amendments Act of 1978). The cornerstone of this framework has been the promotion of the assumption by tribes and other Indian groups of direct responsibility for the education of Indian children. Following this objective, Indian groups have contracted for the operation of many elementary and secondary schools formerly operated by the BIA. Where schools continue to be run by the BIA, Congress has required the creation of Indian school boards and various other measures to ensure a major role for parents and other tribal members in the operation of the school. For all Indian schools funded by the Federal government, the aim today is to provide Indian students with an effective educational program that offers an environment in which each student can maximize his or her learning and that serves the educational goals and aspirations as they are identified and defined by the local Indian community.

The self-determination policies of the Federal government today generally prescribe that Indians should assume control of their own political affairs and should develop

viable reservation economies capable of relieving Indians from their past dependence on Federal assistance. Both these objectives depend heavily on the quality of future Indian education. Better informed and more knowledgeable Indian voters hold the key to a tribal government that serves the best social and economic interests of the full community of tribal members. Successful economic development of Indian reservations depends no less on higher levels of education of reservation workers, managers and entrepreneurs. The future of contract and BIA-operated schools will in significant part determine whether the current Indian policies of the Federal government are successful in introducing a new, more lasting and more satisfactory era in the relations between the Federal government and the Indian tribes.

BIA-Funded Education Today

For the purposes of this report, tribally-operated schools are called "contract schools." Schools that continue to be administered by the BIA are called "BIA-operated." Some of the BIA-operated schools have established cooperative agreements with nearby public schools and are called "cooperative schools." All these schools taken together make up the system of "BIA-funded" schools.

In the early 1980s, more than 3,000 students in BIA-operated schools in Alaska became part of the public school system of Alaska. Excluding Alaska schools, total recorded enrollment in BIA-funded schools has risen by about 2,600 students since 1965. As shown in Table 1, total enrollment outside Alaska reached a peak of 40,280 in 1978. Since then, there has been a small decline in enrollment to 37,917 students in 1987-1988.

The comparative stability of enrollments has been maintained despite an increasing number of contract schools and contract school enrollments. Total contract school enrollment rose from 2,299 students in 1973 to 11,202 students in 1988. At the same time, enrollment in BIA-operated schools declined from 33,532 students to 26,715 students.

Boarding schools include significant numbers of day attendees, as well as actual boarders. Counting only the latter, total boarding enrollment has declined sharply, from 24,051 boarding students in 1965 to 11,264 boarding students in 1988, as boarding schools were closed outright or transformed into day schools. A moderate increase in contract school boarding attendance (from 500 boarding students in 1973 to 2,138 boarding students in 1988) has been overwhelmed by the decline in boarding students attending BIA-operated schools. However, enrollment in day schools operated by the BIA has risen from 11,235 students in 1965 to 17,589 students in 1988--an indication of the strength of tribal support for converting boarding schools to day schools.

Over time, BIA-funded schools have educated a smaller percentage of the total number of Indian students attending elementary and secondary schools in the United States. Within BIA areas of service responsibility the percentage of students attend-

TABLE 1

NUMBERS OF INDIAN CHILDREN ATTENDING BIA-FUNDED ELEMENTARY AND SECONDARY SCHOOLS, EXCLUDING PERIPHERAL DORMITORIES AND ALASKA SCHOOLS

Year	BIA-Operated Schools [1]			Enrollment in Contract Schools [2]			BIA-Funded Schools			Percent Contract		
	Day	Boarding	Total	Day	Boarding	Total	Day	Boarding	Total	Day	Boarding	All Students
1930[3]	3,649	21,416	25,065	0	2,727	2,727	3,649	24,143	27,792	0	11.30	9.81
1940[3]	15,917	11,419	27,336	N/A	N/A	N/A	15,917	11,419	27,336	N/A	N/A	N/A
1952	12,541	15,806	28,347	N/A	N/A	N/A	12,541	15,806	28,347	N/A	N/A	N/A
1960	10,729	18,684	29,413	N/A	N/A	N/A	10,729	18,684	29,413	N/A	N/A	N/A
1965	11,235	24,051	35,286	N/A	N/A	N/A	11,235	24,051	35,286	N/A	N/A	N/A
1970[4]	12,961	23,248	36,209	N/A	N/A	N/A	12,961	23,248	36,209	N/A	N/A	N/A
1973	14,363	19,169	33,532	1,799	500	2,299	16,162	19,669	35,831	11.13	2.54	6.42
1974	14,229	18,804	33,033	1,896	573	2,469	16,125	19,377	35,502	11.76	2.96	6.95
1975	12,605	16,712	29,317	1,918	881	2,799	14,523	17,593	32,116	13.21	5.01	8.72
1976	15,449	19,223	34,672	2,890	924	3,814	18,339	20,147	38,486	15.76	4.59	9 91
1977	16,168	17,463	33,631	5,371	1,176	6,547	21,539	18,639	40,178	24.94	6.31	16.29
1978	16,528	17,054	33,582	5,380	1,318	6,698	21,908	18,372	40,280	24.56	7.17	16.63
1979	17,055	15,844	32,899	5,066	1,346	6,412	22,121	17,190	39,311	22.90	7.83	16.31
1980	N/A	N/A	29,928	5,002	1,784	6,786	N/A	N/A	36,714	N/A	N/A	18.48
1981	N/A	N/A	29,074	5,687	1,819	7,506	N/A	N/A	36,580	N/A	N/A	20.52
1982	15,692	14,297	29,989	7,319	1,268	8,587	23,011	15,565	38,576	31.80	8.15	22.25
1983	16,484	14,004	30,488	7,519	1,324	8,843	24,003	15,328	39,331	31.32	8.64	22.48
1984	17,637	13,596	31,233	7,447	1,273	8,720	25,084	14,869	39,953	29.68	8.56	21.82
1985	16,136	12,394	29,530	7,789	2,185	9,974	24,925	14,579	39,504	31.24	14.98	25.24
1986	17,412	11,216	28,628	7,865	1,982	9,847	25,277	13,198	38,475	31.11	15.01	25.59
1987	17,758	9,870	27,628	8,564	2,080	10,644	26,322	11,950	38,272	32.53	17.40	27.80
1988	17,589	9,126	26,715	9,064	2,138	11,202	26,653	11,264	37,917	34.00	19.00	29.54

[1] All Alaska, postsecondary students and BIA peripheral dormitory residents attending public schools are excluded. Based on student attendance as counted during offical count weeks. Prior to 1976, based on average daily attendance (ADA). Boarding attendance includes actual boarders only. Day students at boarding schools are counted as day students.

[2] Contract enrollment for 1930 consists of contracted mission and private schools. BIA sources do not show contract enrollment in 1940 and following years until 1973. Contract enrollment in 1973 and subsequent years involves contracts with Indian groups. The first such contract was signed in 1966.

[3] The 1930 and 1940 references (see sources) do not show separate enrollment counts for dormitories. As a result, the 1930 and 1940 Boarding BIA count may include some children living in BIA dormitories and attending public school.

[4] BIA enrollment for 1970 includes a small but unknown number of students in contract schools.

Sources: Data obtained from BIA unpublished sources (FY 1980-88); BIA Statistics Concerning Indian Education (FY 1952-1979); Annual Reports of the Commissioner of Indian Affairs (FY 1930, 1940).

ing BIA-funded schools fell from 39 percent in 1930 to 23 percent in 1977 (the last year BIA reported this statistic), due partly to the movement of some Indian families off reservation to seek employment. By 1977, more than two-thirds of Indian students within BIA areas of service responsibility were attending public schools.

Many Indian students live in urban areas where they have no connection with BIA or its services. Nationwide there were 391,937 Indian students enrolled in schools of all kinds in 1986. However, students enrolled in BIA-funded schools were slightly less than 10 percent of all Indian students in the United States.

As part of the preparation of this report, the principals of selected BIA-funded schools were requested to develop a statement of the current status and problems of their school. Excerpts from the 28 replies received from principals are presented in Chapter III. These excerpts offer a view of BIA-funded education from the field perspective. They also serve to illustrate the great diversity of school programs and environments found within BIA education.

For example, some tribes are in extremely remote and isolated environments. The principal of Havasupai Elementary School in Arizona wrote of the school's setting:

> Our Havasupai Tribe consists of 545 people living on our 196,000 acre reservation abutting Grand Canyon National Park. We live in Supai Village, at the bottom of Havasu Canyon. We are the most geographically and culturally isolated Tribe in the continental United States. The nearest road, accessible only by foot or horse, is eight miles away and over a half mile up. The nearest town of 1,000 is 80 miles away. The nearest cities are Kingman (2 hours west) and Flagstaff (3 hours east).
>
> Communications with the "outside world" are sporadic at best. About a dozen families, the school and tribal government offices have phones. But the phones don't work a lot of the time. No broadcast T.V. is available, radio bounces in (and out) only at night. Mail service is now 5 days per week, through which we obtain food and other supplies.

Other schools, however, are located within major metropolitan areas. The principal of the Salt River Day School commented:

> The Salt River Day School was built in 1935, with a number of Indian high school boys helping with the construction. The architecture is Spanish with white-washed adobe brick, red-tiled roofs, and a lovely grassed patio which is very fitting to life on the Southwest's Sonoran Desert.
>
> The Salt River Indian Community is located in Maricopa County, Arizona, at the eastern edge of the Phoenix Metropolitan Area. It is bounded by the cities of Scottsdale, Tempe, and Mesa on the west and

> south; by open land for the most part in the public domain to the east, and by the Fountain Hills Development and the McCormick Ranch on the north.

The facilities of BIA-funded schools are as diverse as the surrounding environments. For instance, one small school on the Cheyenne River Sioux Reservation in South Dakota was described as follows:

> Promise Day School is housed in a building which could be classified as a one-teacher-one-room school with a small apartment for the teacher in the same building. Recently the apartment for the teacher in the building has been converted to a small classroom which is being used for the Chapter 1 program. It also has another small room used as the office and one other room which is used for Special Education. A single width trailer is also located close to the main building and it is used as a classroom for upper grades (5th to 8th). The room in the main building serves as a classroom for grades K-4th. The basement of the building serves as kitchen and lunchroom. The school also has a house for a teacher's residence on the premises and a bus garage which is also used for storing anything spare in the school. Some playground equipment has been there for several years and a few new pieces have also been installed recently. There is no provision for games, sports, and athletics because of no facilities, equipment or personnel for it.

An entirely different physical facility is found at Standing Rock High School, located not very far away in North Dakota on the Standing Rock Sioux Reservation:

> The school facility was occupied for the first time in the fall of 1979. The school is a poured concrete building and was designed on the open space concept. The building is a sprawling, basically one story structure and one of the finest facilities in the area. It includes: modern shop areas for woodworking, drafting, auto mechanics, and home economics. A large gymnasium supports the physical education programs and community supported athletic activities. The academic classrooms, though basically open, have been partitioned by portable walls to create a semblance of self-containment and classroom organization.

Chapter III contains further descriptions of BIA-funded schools with respect to their curricula, teachers, parents, and students, and extra-curricular activities and special programs. One main impression is, as noted, the diversity and uniqueness of BIA-funded education. The system of 168 BIA-funded schools (excluding dormitories) ranges from one side of the United States to the other, covering all kinds of terrain, climate, and other geographic features. Many students entering BIA schools speak primarily their Indian language, covering a wide range of surviving Indian languages in the United States. Some school facilities are rapidly aging and deteriorating, while

others consist of new modern buildings with the most up-to-date in educational designs.

The principals writing of their BIA-funded schools did agree on one element that is found throughout BIA education. The students of BIA-funded schools face major obstacles in reaching a high level of educational achievement. Besides the primary speaking of languages other than English, many students come from social environments where poverty and joblessness are pervasive. The parents of many Indian children are not well educated themselves and often find it difficult to help their children in school. Some of the poorer families find it difficult to provide their children attending day schools with proper nutrition at home (which contributes to the parents' decision to send their children to BIA boarding schools where students are served three meals a day). Unfortunately, social breakdown reflected in alcoholism, divorce, violence and other problems are found in many Indian families. Indian children are asked in school to make the large jump from a home environment that is distinctly Indian to the values and attitudes of mainstream American society, as they are taught in school. All these and other factors contribute to the poor performance of the students of BIA-funded schools, at least as this performance is measured by scores on nationally standardized tests.

As shown in Table 2, the test scores of students in BIA-funded schools were well below the nationwide median scores for their grade level. The average score for the battery of tests for second-grade students in all BIA-funded schools reporting test scores ranked in the 22nd percentile. All other grade levels achieved rankings in the 21st percentile or lower. The lowest scores were achieved by ninth and tenth graders, in each case representing a ranking in the 16th percentile. The overall test scores of contract schools were similar to BIA-operated schools, but tended to be a few percentage points lower.

TABLE 2

PERCENTILE RANKINGS FOR 1986 TEST SCORES, BY GRADE AND TYPE OF SCHOOL BATTERY OF TESTS (Number of Test Takers in Parentheses)

Type of School	Grade 1	2	3	4	5	6	7	8	9	10	11	12
BIA-Oper. Schools	N/A	22% (2,256)	22% (2,441)	22% (2,412)	20% (2,068)	22% (2,045)	22% (1,796)	20% (1,693)	16% (1,037)	16% (947)	20% (819)	21% (803)
Contract Schools	N/A	18 (433)	16 (468)	19 (441)	18 (393)	17 (412)	19 (537)	18 (491)	16 (573)	16 (491)	17 (353)	20 (309)
All BIA-Funded Schools	N/A	22 (2,689)	21 (2,909)	21 (2,853)	19 (2,461)	21 (2,457)	21 (2,333)	19 (2,184)	16 (1,610)	16 (1,438)	18 (1,172)	21 (1,112)

Table 3 shows for each Agency the percentile rankings for the battery of tests achieved by students in BIA-operated schools. There are substantial variations in percentile rankings among Agencies. One grade in one Agency achieved above national norms--the second graders in the Northern Pueblo Agency who achieved a percentile ranking of 52. At the other end of the continuum, several grades in a few agencies achieved percentile rankings below 10.

Some important qualifications should be noted with respect to these test results (and the further results given in Chapter IV). Unlike typical public schools, many BIA-funded schools include special education students in their overall reporting of test scores, creating a relative downward bias. Not all BIA-funded schools reported test scores, so that the overall results represent a partial sample containing around three-quarters of all potential test takers in BIA schools. The test results represent one point in time--the spring of 1986--and thus upward or downward trends cannot be identified. Finally, standardized tests reveal only some elements of student learning. Indeed, some critics contend that test scores measure less important elements of learning and that the content of written test questions too often reflects a cultural bias favoring mainstream students at the expense of minority groups such as Indians.

BIA education includes not only the operation of elementary and secondary schools, but also support for higher education, adult education, assistance to Indian students in public schools, and other program elements. Total annual appropriations for the various programs of BIA education rose from $226.5 million in 1975 to $259.3 million in 1986. In constant dollars, however, this represented a significant decrease in funding. In 1987, the largest element of educational expenditure was school operations, receiving $196.0 million. Other major education areas were the Johnson-O'Malley program of assistance to Indian students in public schools ($22.8 million), funding of BIA higher education ($31.2 million), and assistance to tribal community colleges ($12.9 million).

In 1987, $159.7 million was allocated directly to schools through the ISEP funding formula. This formula allocates funds to schools in direct proportion to weighted student totals in each school. The second largest area of expenditure for school operations was transportation, which received $11.8 million in 1987.

BIA-funded schools are supported by a number of other funding sources, in addition to the basic operating funds supplied through the BIA education appropriation. The operation and maintenance of school facilities is funded through the general BIA budget for operation and maintenance of BIA facilities of all kinds. New school construction and major school facilities renovations and repairs are also funded from BIA sources outside the education budget. Another major source of BIA education funding is obtained through the Department of Education, including the Chapter 1 and special education of the handicapped programs.

TABLE 3

PERCENTILE RANKINGS FOR BIA-OPERATED SCHOOLS FOR 1986 TEST SCORES, BY AGENCY OR AREA

Agency or Area	BATTERY OF TESTS (Number of Test Takers in Parentheses) Grade											
	1	2	3	4	5	6	7	8	9	10	11	12
Cheyenne River	N/A	15%	15%	8%	14%	12%	16%	14%	N/A	N/A	N/A	N/A
Agency	N/A	(20)	(15)	(28)	(20)	(16)	(12)	(7)				
Chinle Agency	N/A	26	11	7	7	8	16	14	11	10	15	22
		(57)	(148)	(202)	(154)	(143)	(159)	(134)	(91)	(103)	(105)	(117)
Choctaw Agency	N/A	12	13	21	13	17	18	14	15	21	17	20
		(111)	(100)	(103)	(89)	(108)	(79)	(86)	(73)	(48)	(38)	(27)
Eastern Area[1]	N/A	36	33	32	46	49	29	24	32	30	30	39
		(73)	(73)	(76)	(53)	(73)	(86)	(72)	(83)	(66)	(55)	(35)
Eastern Navajo	N/A	21	26	31	29	29	21	24	11	11	17	18
Agency		(385)	(372)	(357)	(300)	(261)	(233)	(226)	(189)	(186)	(163)	(164)
Fort Apache	N/A	7	9	10	10	10	19	15	N/A	N/A	N/A	N/A
Agency		(13)	(13)	(19)	(10)	(14)	(12)	(24)				
Fort Defiance	N/A	22	27	24	19	21	24	19	N/A	N/A	N/A	N/A
Agency		(281)	(262)	(267)	(260)	(205)	(215)	(139)				
Hopi Agency	N/A	19	22	30	45	33	35	42	N/A	N/A	N/A	N/A
		(69)	(77)	(70)	(48)	(61)	(33)	(29)				
Laguna Agency	N/A	46	25	32	27	33	N/A	N/A	N/A	N/A	N/A	N/A
		(63)	(61)	(57)	(60)	(55)						
North Pueblo	N/A	52	30	39	37	38	N/A	N/A	N/A	N/A	N/A	N/A
Agency		(27)	(27)	(23)	(33)	(28)						
Papago Agency	N/A	9	11	16	10	13	13	13	12	N/A	N/A	N/A
		(85)	(66)	(62)	(76)	(75)	(84)	(76)	(26)			
Phoenix Area[1]	N/A	43	28	15	19	33	N/A	N/A	16	16	21	21
		(19)	(28)	(21)	(14)	(17)			(161)	(185)	(169)	(195)
Pima Agency	N/A	32	13	21	11	9	N/A	N/A	NA	N/A	N/A	N/A
		(15)	(44)	(31)	(19)	(19)						
Pine Ridge	N/A	27	21	22	18	21	27	11	15	11	16	21
Agency		(61)	(52)	(47)	(42)	(43)	(45)	(64)	(93)	(49)	(31)	(28)
Shiprock	N/A	22	25	20	23	21	24	22	N/A	N/A	N/A	N/A
Agency		(224)	(227)	(212)	(211)	(177)	(137)	(116)				
Southern Pueblo	N/A	21	18	26	24	25	33	40	N/A	N/A	N/A	N/A
Agency		(67)	(66)	(81)	(62)	(73)	(16)	(15)				
Standing Rock	N/A	27	15	18	15	20	21	20	39	26	31	28
Agency		(54)	(60)	(48)	(42)	(54)	(49)	(61)	(33)	(41)	(30)	(32)
Turtle Mountain	N/A	31	12	17	21	23	N/A	N/A	N/A	N/A	N/A	N/A
Agency		(17)	(19)	(23)	(15)	(11)						
Western Navajo	N/A	30	25	23	18	18	21	22	N/A	N/A	N/A	N/A
Agency		(221)	(368)	(346)	(234)	(268)	(248)	(239)				

[1]Includes schools outside any Agency and supervised by Area Offices.

Table 4 shows the total funds spent on BIA-funded elementary and secondary schools for 1985 through 1987 from direct and indirect sources. In 1986, BIA-funded schools received a grand total of $318.9 million, equal to $7,917 per student attending BIA-funded schools. By comparison, total spending in U.S. public schools equalled $4,051 per student in 1986. Within these averages, there were wide differences in the amounts received per student by individual schools. Funding sources for contract schools also differ in some respects from BIA-operated schools.

TABLE 4

TOTAL FUNDING IN SUPPORT OF BIA AND CONTRACT ELEM. AND SECONDARY SCHOOLS, DIRECT AND INDIRECT SOURCES (Millions of Dollars)

TYPE OF FUNDING	1985	1986	1987
ISEP Funding	$154.0	$150.2	$159.7
Technical Support	9.1	8.2	8.7
Other School Operations	14.2	22.9	27.4
Administration	2.2	2.0	2.1
New School Construction	14.0	4.8	5.1
School Facilities Routine Operation & Maintenance	40.7	44.7	42.7
School Facilities Major Improvement & Repair	17.7	17.7	18.3
School Facilities Management Support	10.0	8.6	7.9
Department of Education Set-Asides[1]	34.9	33.9	42.4
Other Dept. of Educ. Funding[2]	18.0	17.6	7.7
School Lunches[3]	7.5	8.3	8.2
Grand Total:	322.3	318.9	330.2

Total 1986 funding per pupil, BIA and contract schools = $7,917 per pupil.

1986 average funding per pupil, all U.S. public schools = $4,051 per pupil (including an estimate of capital costs).[4]

[1]Includes Chapter 1, special education and science/math funds.

[2]Includes bilingual education, Title IV (contract schools only) and impact aid funding (estimated).

[3]Department of Agriculture funds.

[4]Funding level shown in U.S. Department of Education's Center for Education Statistics, The Condition of Education: A Statistical Report (1987 Edition), p. 34.

Sources: See tables 3, 4, 5, 6, 7 and 8 in Chapter V.

The higher cost per student in BIA-funded schools reflects a number of special high-cost factors in BIA education. Transportation costs per student are higher because students must often be bused long distances to school over difficult roads. Small BIA day schools--many containing fewer than 100 students--involve high costs of operation. The single most important high-cost factor is the need to provide dormitory services and facilities for boarding students. Disproportionate numbers of students in BIA-funded schools also have learning problems and handicaps that require special attention.

The high cost of BIA schools also reflects the personnel structure of BIA schools. Excluding dormitory personnel, the ratio of pupils to total personnel in BIA-operated schools was 4.4 to 1 in 1987. By comparison, the ratio of pupils to total personnel in public schools was 9.6 to 1 in 1985. The chief explanation for the high number of personnel in BIA-funded schools is found in the nonprofessional categories of personnel such as education aides, clerical help, cooks, bus drivers, and others. Professional personnel represented 41 percent of all BIA instructional (nondormitory) personnel in 1987. In public schools, however, professional personnel represented more than 60 percent of total personnel in 1985.

Table 5 shows the percentages of personnel in different personnel classifications for BIA-operated and public schools. Education aides represented 26 percent of all BIA school personnel, compared with 7 percent of public school personnel. In contrast,

TABLE 5

DISTRIBUTION OF INSTRUCTIONAL PERSONNEL IN BIA-OPERATED SCHOOLS AND U.S. PUBLIC SCHOOLS, BY PERCENT

PERSONNEL TYPE	BIA Personnel[1]	Public School Personnel[2]
Teachers[3]	18.4%	53.4%
Administrators	2.0	4.6
Counselors	1.8	1.6
Education Aides[4]	26.0	7.4
Support and Other Staff	51.6	33.0
TOTAL:	**100**	**100**

[1]Excludes dormitory personnel. Figures shown are for 1987.

[2]Percentages of personnel in 1985.

[3]Includes all personnel classified as teachers in BIA personnel records. Other BIA personnel not classified as teachers may perform teaching duties as part of their employment.

[4]Includes "education" aides in BIA schools and "classroom" aides in public schools.

Note: BIA central personnel files do not contain equivalent data for contract schools.

personnel classified by BIA as teachers represented 18 percent of total instructional personnel of BIA-funded schools, while teachers represented 53 percent of total personnel in public schools. However, the system of BIA personnel classifications includes other professional positions that may include some teaching as part of employee duties, making precise comparisons difficult.

Figure 1 shows estimates of the impact of each high-cost factor on the total costs of BIA-funded schools. For example, the added cost due to very small schools (less than 100 students) contributes an additional $90 per student--averaged over all students in BIA-funded schools--to the total costs of BIA education. Boarding schools contribute an added cost in the range of $900 to $1,500 per student, averaged over all students in BIA-funded schools. The five high-cost factors--transportation, small rural schools, the boarding program, special student learning needs and personnel intensiveness--in major part explain the higher costs of BIA-funded schools, as compared with public schools.

Spending for BIA education is only a limited part of total Federal spending for Indian education in the United States. In particular, the Department of Education (ED) provides special funding for Indian students in public schools through a variety of funding mechanisms. Total ED funding levels for the various programs providing assistance to Indian students have risen from $33 million in 1970 to $335 million in 1986. The largest source of such ED funds is Impact Aid, which in 1986 provided $226 million for the education of Indian students in public schools. The Impact Aid program involved greater total Federal funding than the total direct appropriations to BIA education for the operation of BIA-funded elementary and secondary schools.

Towards Effective BIA Schools

In light of the findings of this report with respect to BIA education, the Office of Indian Education Programs proposes to introduce into BIA-operated schools the educational lessons of the effective school movement. Recent educational research has demonstrated that effective schools have many characteristics in common, including:

- High expectations for student success.
- A clear sense of educational mission and purpose.
- Principals who provide strong leadership.
- A safe and orderly school environment.
- An emphasis on the learning of basic skills and the developing of a quality curriculum responsive to the academic and career development needs of the student.
- Students who are held academically accountable and whose progress is regularly monitored.

FIGURE 1

CUMULATIVE IMPACT OF HIGH-COST FACTORS IN BIA EDUCATION IN FY 1986

Full BIA Cost	=	$7,917 per student
Less adjustment for high transportation costs ($150 per student)	=	$7,767 per student
Less adjustment for very small schools of fewer than 100 students ($90 per student)	=	$7,677 per student
Less adjustment for boarding program costs ($900 to $1,500 per student)	=	$6,177 to $6,777 per student
Less adjustment for high Chapter 1 and Special Education costs ($735 per student)	=	$5,442 to $6,042 per student
Less adjustment for high personnel costs of instruction program ($1,200 per student)	=	$4,242 to $4,842 per student
Average 1985-86 U.S. public school cost per student, including capital costs	=	$4,051
Average 1985-86 U.S. public school cost per student, not including full capital costs	=	$3,752
Average 1985-86 public school cost per student, not including full capital costs		
Montana	=	$4,091
California	=	$3,543
North Dakota	=	$3,481
New Mexico	=	$3,195
Oklahoma	=	$3,146
Arizona	=	$3,093
South Dakota	=	$3,051

- Close involvement of parents and the local community in the educational process. Incorporation of the community milieu into content of curriculum.

The proposed overall goal of BIA education is to introduce and develop these characteristics of effective schools within all BIA-operated schools. In addition, a number of more specific goals are proposed in this Final Review Draft with respect to the operation of BIA schools. The Final Report will include a final set of goals, perhaps modified from the goals proposed here, depending on public review and comment. The proposed goals are as follows:

Proposed Goal 1: Incorporate the Elements of Effective Schools into All BIA-Operated Schools

Fundamental elements of effective schools, as established by recent effective schools research, can be incorporated into the BIA's educational program to improve the quality of principal leadership, teacher instruction and student academic achievement at all BIA schools. Incorporating such elements into individual school programs will help local school administrators and students feel a sense of common accomplishment toward the goal of maximizing each student's learning. The effective schools approach emphasizes that the tribal community must have extensive opportunity to take an active role in the school.

Proposed Goal 2: Develop Stronger BIA Educational Leadership at All Levels

Effective schools require a school environment conducive to learning. In creating such an environment, the role of the school principal is critical. Building effective BIA schools requires special emphasis on the selection and retention of principals who possess strong leadership qualities. Indeed, an introduction of stronger leadership throughout BIA education is needed, ranging from school principal to Agency Superintendent for Education to Director of OIEP. To achieve effective leadership at all levels within OIEP, it will be necessary to assess training needs of all current supervisors and provide for appropriate developmental training. Concurrently, OIEP must identify potential supervisors within the organization and provide them with management training, as required. To strengthen the managerial ranks, particularly at the national level, it may be necessary for OIEP to encourage applications from well qualified non-BIA, university and public school professionals whose expertise is in Indian education. Systems of evaluation of leaders are needed to ensure that those unable to provide effective leadership are placed in positions more suited to their skills.

Proposed Goal 3: Improving Teacher Compensation

Teachers are the heart of the educational process. The educational task BIA teachers face is one of unusual complexity and challenge. Many BIA teachers live in hardship conditions, while they are paid salaries that are typically 25 percent less than the salaries of their public school counterparts in the same areas. The very high turnover

rate and difficulties in recruiting BIA teachers should come as no surprise. Along with improving overall teacher compensation, BIA should take steps to ensure that it recruits and retains teachers of the highest educational skills and competence.

Proposed Goal 4: Establish Greater Internal Communication and Training

At present the BIA schools function as largely autonomous units. Below the Agency level, in particular, there is little sense among BIA schools of participation in a joint educational undertaking. Agency and school personnel would benefit from BIA education newsletters, conferences and assemblies of BIA teachers and administrators, and visits by school staff to other schools, promoting a sense of all BIA schools engaged in a common enterprise of Indian education. Teacher in-service training programs could be significantly expanded and improved. The BIA could establish a policy research unit to collect data, conduct program analyses and undertake or co-sponsor needed research.

Proposed Goal 5: Examine the Numbers and Levels of Compensation of Nonprofessional Personnel in BIA Schools

BIA-funded schools are receiving funding levels per student that are well above public school levels. Even when allowance is made for boarding programs, long transportation distances, small schools, and other special high-cost factors found in BIA education, BIA funding levels still exceed the U.S. public school averages per student. Given current pressures on the entire Federal budget, BIA schools are unlikely to receive much higher funding in the future. If BIA schools need additional funds to support higher teacher compensation, in-service training, and other educational goals, these funds may have to be found by reallocations within the existing BIA education budget.

One prospect for making new funds available that bears examination is to reduce gradually the employment numbers and levels of compensation for nonprofessional personnel. BIA-operated schools have more than twice the total of nonprofessional instructional (nondormitory) personnel per student, as compared with public schools. One of the main reasons is that education aides represent 26 percent of all BIA school employees, whereas classroom aides constitute 7 percent of total public school staff. If adopted, any such goal should be implemented only by attrition and no existing job holders should lose their jobs. Similarly, no current employee should suffer a wage reduction, but newly hired cooks, bus drivers, and other nonprofessional employees might receive lower job classifications and compensation.

Proposed Goal 6: Take Steps to Establish a Working Group to Revise the ISEP Formula in Light of Changing Educational Priorities, Philosophies, and Other New Circumstances

The ISEP formula for distributing funds will be 10 years old in 1989. Adopted in a hurried fashion, it may be time to revise this formula to take account of changing educational circumstances. Many questions have been raised about the student weights used in the ISEP formula. The relative costs appropriate for students in different programs may have changed. New weights for prekindergarten students and for gifted and talented students have been proposed. Procedures for setting official attendance levels may need to be revised. Also, it might be possible to incorporate the distribution of funds for facilities operation and maintenance within the broader ISEP distribution. Another factor that may bear consideration is incorporating into the formula some relationship to public school costs in the nearby vicinity.

Proposed Goal 7: Continue to Encourage Students to Attend Local Day Schools

Boarding students cost $3,000 or more per student to educate and house than day students. Boarding schools also remove students from the student's familiar family environment. For many students the alternative to a boarding school is a small day school in a remote area. Such a small school may fit into and receive strong support from the local parents and community. Even if small day schools have above-average costs per student, compared with other day schools, the costs per student of small day schools typically will be much below the costs per student of boarding schools.

Proposed Goal 8: Encourage a Continuation of the Growth in Enrollment in Contract Schools

Contract school enrollment has grown from 2,299 students in 1973 to 11,202 students in 1988. Successful implementation of the government's policy of tribal self-determination (as found in P.L. 93-638 and P.L. 95-561) will be reflected in the continuation of this trend. Contracting has thus far proceeded largely school by school, but tribes may want to examine the prospect of contracting for the tribal management of all BIA-funded schools on a reservation. The Federal government may want to adopt a formal policy announcing support in principle for this step. While promoting tribal self-determination, it is also important that tribal schools remain accountable for the performance of their students. Where tribal schools are experiencing difficulties, assistance in diagnosing and remedying any problems should be made available.

Proposed Goal 9: Encourage Tribes to Explore the Financial Benefits and Feasibility of Tribally Managed Public School Districts on Reservations

For some tribes the largest total funding for reservation schools may be obtained by setting up reservation public schools--serving predominantly Indian students--and operating these tribal schools as a new public school district. Such a district would combine substantial Federal funds already now available for Indian students in public

schools with substantial state funds also now available to any school district within the state. By combining Federal and state funds, the total funds received by a tribally-managed school may significantly exceed the level of funds that would be available to a tribal contract school funded directly by BIA.

Proposed Goal 10: Establish a Process for Making School Facilities Decisions that Develops Estimates of the Full Educational and Financial Impacts of Alternative Facilities Arrangements

Facilities decisions are in many cases the instrument for implementing broader educational priorities. Yet, current facilities decisions are made largely in an ad hoc fashion. Facilities decisions should be made with a more accurate understanding of the academic (instructional) and financial impacts of alternative facilities arrangements. Major facility decisions should be made with BIA education representatives providing education input.

It may be useful to develop a computer model for estimating the educational and financial impacts of alternative facilities arrangements. Such a model was partially developed for the Chinle Agency as part of a demonstration project. This model, or a revised version, may be appropriate for extension to other BIA Agencies or local BIA school systems. New formal procedures are needed in order to ensure that a full range of facility alternatives receives consideration and that estimates are developed of the educational and cost impacts of these alternatives.

Proposed Goal 11: Take Steps to Extend BIA Educational Efforts to Include Preschool Children, Outreach Programs for Child Health and Nutrition, and Outreach Programs to Instruct Parents in Helping their Children in School

Education research of the past decade has emphasized that schools are only one part of a broader set of significant influences on the learning of children. At the time they enter kindergarten, many children already are lacking in attitudes and skills needed to do well in school. In later school years, the maintenance of good health and nutrition, as well as the strong support and encouragement of parents, may be critical factors in student performance in school. Given the critical importance of these influences, especially for many minority children, educators are now beginning to involve themselves beyond the classroom into the community where the student lives. Any such programs should be coordinated closely with Head Start and other available Federal programs in order to avoid duplication.

Proposed Goal 12: Encourage BIA Schools to Emphasize the Teaching of Basic Knowledge and Skills Necessary for Future Employability and Reservation Economic Development, as Well as the Opportunity for Full Participation in Modern Life

Indian reservations typically suffer from severe unemployment, due to the lack of economic development. The future economic growth of reservations will depend on

the education of the next generation in the basic knowledge and skills necessary to create and manage successful businesses, as well as providing a capable and stable work force. Such basic knowledge and skills--including reading, writing, language arts, mathematics, history, geography, and other social studies--are also necessary for obtaining access to books and magazines, the ability to communicate effectively with others over long distances, and generally the opportunity for full individual participation in modern society.

Proposed Goal 13: Encourage BIA Schools to Give Greater Emphasis in their Curricula to Tribal History; Relationships of Tribal Governments to Other Established Governments; Tribal, State and Federal Law; Cultural Anthropology; Heritage of Indigenous Americans; and Impact of World Trends on Reservation Economies

Successful economic development of reservations will depend on the achievement of stable tribal political and legal institutions. The self-esteem of BIA students may be enhanced by formal recognition in school curricula of the importance of tribal history, cultural anthropology and heritage. These subjects will be of particular intrinsic interest to many Indian students, possibly motivating them to greater learning efforts in all areas and providing them with a greater appreciation of the world around them. In addition to new curriculum offerings, BIA education could support study of tribal culture and socioeconomic institutions in a variety of other ways. The BIA could support the development of textbook materials for Indian children, or could sponsor efforts in particular schools to develop such materials for broader distribution throughout the system of BIA education. Lecturers in Indian history and culture could be encouraged to visit BIA schools. Indian elders can share insights in traditions and living successfully as an Indian in a modern, changing world. Innovative satellite instruction and interactive laser videodisk technology might be used to increase student interest and overall involvement in these subject areas.

Proposed Goal 14: Establish a Program for Identifying Particularly Successful BIA-Funded Schools, Administrators, Teachers, and Instructional Programs, in Order that the Basis for this Success May Be Communicated Throughout the BIA-Funded School System

Formal identification of especially successful efforts in BIA-funded education would serve two main purposes. Most important, it would help to provide role models and inspirational examples for others to adopt the same successful methods and approaches. It is also appropriate that successful schools, teachers, administrators, and programs should be given public recognition and credit for their accomplishments as one part of the reward for their efforts.

Proposed Goal 15: Improve the Data Gathering, Reporting Procedures, and Knowledge Base for the Various Schools and Programs within BIA Education

Effective management of a school system is impossible without knowing what is occurring within that system. BIA schools need greater freedom from bureaucratic con-

trols, paperwork burdens, and central rules and regulations. Yet, the price for greater freedom is greater accountability for results, which depends on the generation of data bases providing accurate information to all levels of OIEP on test scores, dropouts, personnel turnover, and a number of other matters. At present BIA information capabilities are limited. One part of the solution may be the creation of an office or center of education policy, research, and program analysis within the Office of Indian Education Programs and under the supervision of the Director of OIEP. Such a unit, to be effective in providing a wide range of needed services, might be field-based and perhaps associated, collaboratively, with a major university.

Introduction

In 1983, the National Commission on Excellence in Education released its report, *A Nation at Risk: The Imperative for Educational Reform*. The Commission found that the quality of American education is critical for American prosperity, security and civility.[1] Yet, the Nation faced a great challenge because "the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people."[2] As the Commission stated, the many failings of American education posed a challenge to core values of America itself:

> Part of what is at risk is the promise first made on this continent: All, regardless of race or class or economic status, are entitled to a fair chance and to the tools for developing their individual powers of mind and spirit to the utmost. This promise means that all children by virtue of their own efforts, competently guided, can hope to attain the mature and informed judgment needed to secure gainful employment and to manage their own lives, thereby serving not only their own interests but also the progress of society itself.[3]

These hopes and goals for American children include Indian children in Bureau of Indian Affairs (BIA) schools. Perhaps even more than most, Indian children need effective schools in order to acquire the knowledge and skills for successful functioning in American life while retaining their interest in their cultural heritage. Children coming from economically and educationally advantaged home environments may depend less on formal schooling. But large numbers of Indian children do not have these home advantages; they must look to the school system as the main source of their formal education to help raise their tribe's and their own economic status.

From one perspective Western-oriented education for Indians, as provided in part by the BIA, has been a great success. One hundred years ago, few Indian children had the opportunity or need to attend school. Today, almost all have at least this opportunity and the majority take advantage of it. In 1980, 60 percent of Indians in the age group from 18 to 24 were high school graduates. In the past 100 years Indian education has paved the way for thousands of Indian college graduates who have become well educated in the Western sense, while, for many of them, retaining their tribal identity.

Despite these gains, however, Indian education from another perspective is a major failure. Indian children drop out of school at rates much higher than the dropout rates of other population groups. On average, Indian children receive lower grades and have lower scores on nationally normed, standardized tests measuring achievement (although these tests are considered by some educators to be culturally biased). Far too many Indian children still leave school without having mastered the basic knowledge and skills that formal education is supposed to provide.

There are many reasons to be greatly concerned about this state of affairs. Pervasive poverty, unemployment, alcoholism and other social disabilities would be a grave concern in any minority or other population group. In the case of Indians, the concern is heightened by the long history of conflict between white society and American Indians/Alaska Natives. Unlike all other Americans who trace their origins at some point to immigration, Indians and Alaska Natives, as indigenous Americans, were not, and some today are not, voluntary participants in the American way of life. The Nation has a special obligation to its Native peoples.

Yet, it is not necessary to put the argument for improving Indian education in such moral terms. Indeed, there are strong pragmatic educational and economic arguments that would be sufficient in themselves. For tribes to realize their goal of self-determination and for individual tribal members to become self-reliant, existing educational programs must assist Indian students throughout their schooling to acquire substantive academic and vocational skills--skills from which to build strong, viable tribal economies.

Because of declining birth rates among middle class and other advantaged populations, the American work force of the future increasingly will be drawn from current minority and other disadvantaged groups. A report done for the U.S. Department of Labor recently found that "over the next 13 years, blacks, Hispanics and other minorities will make up a large share of the expansion of the work force. Non-whites, for example, will comprise 29 percent of the net addition to the work force between 1985 and 2000 [compared with 14 percent of the population in 1985]."[4] The Labor Department-sponsored report further found that:

> The prospect that minorities will comprise a very large fraction of the new additions to the labor force over the next 13 years appears, on the surface, to present an unprecedented opportunity. As employers reach further down the labor queue, they might be expected to provide better job prospects for historically disadvantaged groups and to invest more heavily in their education and training.
>
> But the pattern of job growth in higher-technology occupations requiring more education, and the likelihood of greater employment gains in metropolitan regions with fewer minority residents, suggest that this sanguine outlook is far from assured.[5]

As U.S. businesses contemplate the prospects for their future work force, they have begun to show a deep and growing concern for the quality of minority education in the United States. The Committee for Economic Development (CED) is a prominent policy study group that includes representatives from many of America's largest corporations. In 1987, it released a new policy statement, *Children in Need: Investment Strategies for the Educationally Disadvantaged,* issuing a call for "the Nation to embark upon a third wave of [educational] reform that gives the highest priority to early and sustained intervention in the lives of disadvantaged children."[6]

These leaders of the American corporate world took note of the fact that "demographic trends dramatize the need to address seriously the plight of the disadvantaged. The sheer numbers and the growing proportion of the U.S. population that they represent are staggering."[7] The implications for American business were seen by the businessmen as grave:

> If present trends continue without corrective actions, American business will confront a severe employment crisis. This scarcity of well educated and well qualified people in the work force will seriously damage this country's competitive position in an increasingly challenging global marketplace. Current projections point to a serious labor shortage in only a few years. By 1990, the impact of new technologies is expected to drive total private-sector demand for employment to 156.6 million jobs, nearly twice that in 1978. If these estimates are only close to the mark, there will be a shortage of over 23 million Americans willing and able to work.
>
> Our industries will be unable to grow and compete because an expanding educational underclass will be unable to meet the demands of such jobs. Moreover, these young people will not enjoy the levels of literacy needed to make informed choices about their lives or to carry out the responsibilities and reap the rewards of citizenship in a democratic society.
>
> The technological revolution and intensified global competition have brought dramatic and irreversible changes to the job market. The nation's manufacturing sector has become more productive, but, at the same time, its jobs rely less and less on unskilled, manual labor. As production processes depend increasingly on computers and other sophisticated machinery, manufacturing jobs demand greater intellectual ability. Likewise, jobs in the growing service and knowledge industries, by their very nature, require more literate workers with good problem-solving skills--workers who have learned how to learn.[8]

At a time when greater demands are being placed on the American education system, especially with respect to the education of minority and disadvantaged youth, this system has been failing many of these youth. It has been estimated that almost one million from this group will leave school in 1987, departing with inadequate read-

ing, writing, mathematical and other skills. Most of these dropouts will be unable to meet the requirements of new jobs in the expanding knowledge-based and technological sectors of the American economy. The collective cost to the Nation in lost lifetime earnings and foregone taxes from a single year's dropouts from school have been estimated to exceed $200 billion.

Taking action to improve the education of minority youth is not only a social responsibility but also an economically wise policy. Future improvements in minority education can be regarded as a form of investment that offer future benefits substantially exceeding the costs. These benefits include higher earnings by workers, higher profits by companies, higher taxes collected by governments, and reduced medical, unemployment, welfare and other payments by the government. As shown in Table 1, some estimates have shown that the benefits of programs such as preschool education and compensatory education can be as much as five or six times the costs.

TABLE 1

RETURNS TO EDUCATION PROGRAMS

Type of Program	Impact	Estimated Returns to Program
Preschool Education	Greater school success, employability and self-esteem; less dependence assistance.	**4.75 to 1** due to lower costs of special education, public assistance and crime.
Chapter 1	Higher achievement and maintenance of gains in reading and mathematics.	Can be **6 to 1** by saving cost of repeating grade.
Special Education	Larger numbers of students receiving services and more services available.	Early action can later **save** school districts **$1,560** per disabled pupil.
Youth Employment and Training	Greater employability, wages, and income while in school and afterwards.	**1.5 to 1** in some research studies.

SOURCE: Committee for Economic Development, Children in Need: Investment Strategies for the Educationally Disadvantaged (New York, 1987).

The publication of *A Nation at Risk* and other reports with similar conclusions helped to stimulate a nationwide drive in the 1980s to improve public school education. Public school teacher salaries have been raised, standards of student performance tightened, procedures for teacher accountability instituted, and other measures taken. Yet, the reform movement in public school education has thus far had only a minor impact in BIA-operated schools and Indian education more broadly. The greatest attention with respect to minority education has thus far been directed to black and Hispanic students.

Indians collectively are less than one percent of the U.S. population. Moreover, most Indian children--around 90 percent--attend public schools. The BIA education system is thus a small part of American education and even of minority education. Today, BIA-operated and contract schools together have only about 38,000 students. Among all U.S. school systems, the BIA-funded school system ranked 83rd in total numbers of students in 1984, a little larger than the public school system of Corpus Christi, Texas, and a little smaller than the public school system of Oklahoma City, Oklahoma.

Given the importance of BIA-funded schools in establishing the quality of life for individual tribal members and their tribes, the relatively small size of the BIA school system is no reason not to attempt to improve it. BIA education suffers from most of the problems and the poor results of minority education throughout America. If these problems are to be resolved, there must be gradual progress on many fronts, progress that will often be achieved classroom by classroom and school by school. The BIA education system is a small battleground in the movement to improve U.S. education, but it is by winning many such small battles that overall progress is made, for the benefit of the individual and the tribe. If the United States is to have a future work force adequate to the requirements of a technological age, it will have to make the necessary efforts and give the concentrated attention to those many schools--including the BIA schools--that are in dire need of help.

FOOTNOTES TO INTRODUCTION

1. National Commission on Excellence in Education, *A Nation at Risk: The Imperative for Educational Reform* (Washington, D.C., 1983).

2. Ibid., p. 1.

3. Ibid., p. 2.

4. Hudson Institute, prepared for the U.S. Department of Labor, *Workforce 2000: Work and Workers in the 21st Century* (Indianapolis, June 1987), p. 89.

5. Ibid., p. 91.

6. Committee for Economic Development, *Children in Need: Investment Strategies for the Educationally Disadvantaged* (New York, 1987), p. 3.

7. Ibid., p. 9.

8. Ibid., pp. 4-5.

PART I THE CONDITION OF BIA EDUCATION

CHAPTER I

A Brief History of Indian Education

Long before the arrival of the first European to the shores of the Americas, Indian education was a reality--a time when Indian education effectively met the needs of Indians and was conducted entirely by Indians, an epoch of Indian self-determination. The foundation of Indian education evolved from the nuclear family where parents taught their children the necessary skills to survive in a subsistence lifestyle, to communicate with family members and to use social skills appropriately. With the aggregation of nuclear family units, the act of transmitting knowledge--education--became more complex. Families formed clans, bands, tribes and other kin and political groups where the responsibility for educating the culturally uninitiated young was often established along matrilineal or patrilineal descent lines. The focus of pre-European Indian education was to facilitate the child's acquisition of cultural knowledge necessary to meaningfully contribute to the overall socioeconomic welfare of the group, while also sharing their values, appropriate behaviors and language.

With the founding of the Jesuit Mission school, established in Cuba in 1568 to "civilize and Christianize" the Florida Indians, American Indian education entered a new phase.[1] In the seventeenth century the colleges of Harvard and William and Mary were created with a purpose in part to educate Indian children. King James I called upon the Anglican clergy to educate the "children of these barbarians in Virginia." By and large, however, the policy of the English was to keep Indians and European settlers separated from one another. Thus, the goal was not to assimilate Indians, but to keep them outside the bounds of existing Western civilization, pushed westward beyond the current frontier.

As the newly independent United States took control of its own affairs, it signed the first treaty providing for Indian education in 1794. In exchange for land of the Oneida, Tuscarora and Stockbridge Indian tribes, these tribes were granted a tax exemption and given assurances that they would receive education, medical care and other basic needs in perpetuity. In 1802, the Trade and Intercourse Act included the first formal statutory provision accepting a Federal responsibility for Indian education. With legislation passed on March 3, 1819, the Congress appropriated $10,000 annually for the purpose of "the civilization of the Indian tribes adjoining the frontier settlements" and for the further purpose "to instruct them in the mode of agriculture suited to their situation; and for teaching their children in reading, writing, and arithmetic." This

1819 Act established a formal legal basis for the future education efforts of the Indian Service (forerunner of the Bureau of Indian Affairs).

The funds provided under the Act of 1819 were not spent directly by the government, but were largely given to mission schools. Unlike the 1700s, the intent of the Act was eventual assimilation, which it was taken for granted involved two key elements, the inclusion of the Indian within the work force and the education of the Indian to white and Christian ways. A leading historian of U.S. Indian policy, Francis Prucha, writes that "to civilize meant to bring to a state of civility out of a state of rudeness and barbarism, to enlighten and refine. It meant at a minimum to lead persons who lived a natural life in the wilderness, relying upon hunting and gathering, to a state of society dependent upon agriculture and domestic arts (spinning and weaving); to this was added instruction in reading, writing, arithmetic, and the truths of the Christian religion."[2] Illustrating these attitudes, one missionary society stated its hopes for Indian education in 1823:

> Let then, missionary institutions, established to convey to them the benefits of civilization and the blessings of Christianity, be efficiently supported; and, with cheering hope, you may look forward to the period when the savage shall be converted into the citizen; when the hunter shall be transformed into the mechanic; when the farm, the work shop, the School-House, and the Church shall adorn every Indian village; when the fruits of Industry, good order, and sound morals, shall bless every Indian dwelling; and when throughout the vast range of country from the Mississippi to the Pacific, the red man and the white man shall everywhere be found, mingling in the same benevolent and friendly feelings, fellow citizens of the same civil and religious community, and fellow-heirs to a glorious inheritance in the kingdom of Immanuel.[3]

Unlike the English earlier, the United States government viewed Indian education with a vision to assimilate the Indian fully into the white man's civilization. The desirability of this goal and the superiority of a white existence were not questioned.

Education on Reservations

Indian education entered yet another stage with the creation of the reservation system in the second half of the nineteenth century. The goal remained the same--assimilation of the Indian--but it was now pursued more systematically, requiring a growing bureaucracy to administer Indian education. The number of education employees of the Indian Service grew from 238 in 1881 to 1,936 in 1897. Expenditures of the Indian Service for education rose from $38,000 in 1874 to $2.0 million in 1895. The numbers of Indian students rose correspondingly from about 3,500 students in 137 government schools in 1878 to more than 10,000 students in 231 government schools in 1887. To be sure, the facilities available were still sufficient only to accommodate a small minority of all Indian children of school age.

Indian education remained closely linked to the goal of converting Indians to Christianity. Indeed, substantial numbers of Indians were educated with Federal financial assistance in missionary "contract schools." In 1883, the contract schools included 22 boarding (schools having dormitory facilities) and 16 day schools, receiving more than $250,000 in Federal assistance. Direct Federal funding of mission schools continued until quarreling among different religious bodies resulted in the ending of contract support in 1897.

At the turn of the century, government educators adapted a philosophy to remove as much influence and evidence of traditional Indian culture from the schools as possible. The use of Indian language was resisted and barred from the instructional programs--in some cases even outside the classroom. Boarding schools were advocated as a means of removing Indian children from the harmful influence of traditional Indian culture. The Federal government sought to pressure reluctant Indian parents into sending their children to boarding school, threatening them in some cases with denial of food rations or of annuity payments. The most famous boarding school was the Carlisle Indian Industrial School, founded by Richard Pratt in 1879. According to Prucha, Pratt believed in the "complete integration of the Indians into white society, and his whole program was geared to that good. Anything that tended to isolate or segregate the Indians [among themselves] was to him anathema."[4] Other famous Indian boarding schools were the Haskell Indian School (which still exists as Haskell Indian Junior College), founded in Kansas in 1878, and the Chemawa Indian School (also still in existence), founded in Oregon in 1880.

Indian education was strongly promoted by members of the "social gospel" reform movement, many of whom met annually to plot strategy at Lake Mohonk in New York State. An ordained Baptist minister, Thomas Morgan, was Commissioner of Indian Affairs from 1889 to 1893 and one of the more prominent leaders and advocates of Indian education. He believed in a Nation considered to be "one of the richest on the face of the earth, with an overflowing Treasury" that it was incumbent on the government to provide Indians with the means to enter the mainstream of American life. Education, along with economic development, were to be the main vehicles. Morgan in 1889 stated his views on the proper philosophy to guide Indian education--views that he was seeking at the time to implement as Commissioner:

> When we speak of the education of the Indians, we mean that comprehensive system of training and instruction which will convert them into American citizens, put within their reach the blessings which the rest of us enjoy, and enable them to compete successfully with the white man on his own ground and with his own methods. Education is to be the medium through which the rising generation of Indians are to be brought into fraternal and harmonious relationship with their white fellow-citizens, and with them enjoy the sweets of refined homes, the delight of social intercourse, the emoluments of commerce and trade, the advantages of travel, together with the pleasures that come from literature,

> science, and philosophy, and the solace and stimulus afforded by a true religion.[5]

The two main vehicles for achieving assimilation, Indian education and Indian economic development, were linked in the Allotment Act of 1887 (Dawes Act). Reservation land not needed for allotment to individual Indians was to be disposed and the revenues used for the financing of the system of Indian education. Greater Indian education would provide the knowledge, skills and habits of behavior needed for economic success; in turn, the prospect of a good job would provide a key incentive for education.

Indian educators hoped that their efforts would be temporary. The Indian school system, if it were successful, should be self-liquidating, as Indians were brought into the mainstream of American life. However, events were to prove otherwise. The New Deal would bring formal government acceptance of a permanent status for Indian reservations and, correspondingly, a continuing Federal role in Indian education.

Education and Indian Cultural Pluralism

By the 1920s many critics were finding that allotment and other government strategies aimed at Indian assimilation were not having their intended effects. Allotment had resulted in the loss of about two-thirds of Indian land, yet had not produced the class of independent and self-sustaining Indian farmers that had been expected. Many Indians proved unwilling or unable to give up the Indian heritage and to adopt the beliefs and ways of non-Indian society. Many Indians remained on reservations where they suffered from cultural disorientation as reflected in high rates of poverty, poor health, chronic alcoholism, inadequate education and low self-esteem. The Bureau of Indian Affairs seemed unable to break the cycle of economic deprivation, low educational attainment, poor health and other such disabilities. In 1928 the Meriam Report, prepared by the Brookings Institution, provided a comprehensive analysis and extensive documentation of the failures of existing Indian policies.[6]

The self-confidence of Western society in its religious, scientific, economic and other beliefs had also been significantly eroded. The vast destruction that occurred in World War I seemed for many intellectuals to challenge past assumptions of automatic human progress under Western leadership. The new mood of self-doubt would play a major role in Indian affairs, undermining the previous certainty of the benefits of complete Indian assimilation and yielding a much greater acceptance and tolerance for Indian cultural diversity.

John Collier was the longest serving and most famous commissioner in the history of the BIA, occupying this position from 1933 to 1945. He was the architect of a basic reorientation of Federal policy towards Indians, affirmed by the Congress with the passage of the Indian Reorganization Act of 1934. Collier's views were formed in the 1920s and represented a drastic departure from the Indian reformers of the late 19th century. As one student of Collier writes:

> Important for the future of Indian policy among this group of intellectuals and reformers was John Collier, who discovered among the Pueblos of the Southwest the sense of community and harmony of life he thought White American industrial society lacked. After losing hope of re-establishing neighborhood communities and grassroots democracy among the immigrants and poor of New York City, ... Collier joined a group of intellectuals who, alienated from the business civilization of the 1920s, had fled to Taos, New Mexico, instead of Paris. There, ... Collier found hope for the survival of civilization in his rediscovery of the integrated primary social group and community lived by the "magical" Indians. He saw the Indians as repudiating the materialism, the secularism, and the fragmentation of modern White life under industrialism for a simpler, more beautiful way of life that emphasized the relationship of humans with one another, with the supernatural, and with land and nature. The integrated life of the Pueblos stood as a reproach to atomized modern civilization; and their harmonious, democratic ways a vital lesson to all White Americans. To Collier, the survival of this "Red Atlantis" into the modern era offered a hope for the future of the world in spite of industrialism. He romanticized the heritage of these folk societies as part of his alienation from his own "sick" times, and the Pueblos became his own personal countercultural utopia.[7]

In the past Indian education had sought to minimize the exposure of Indian children to Indian culture. That was a primary purpose of the boarding school, which removed the child from the direct influence of parents and the Indian community. One of Collier's first acts as BIA commissioner was to reverse this policy, redirecting Indian education to the use of community day schools. In his first year Collier either closed or converted to day use 10 schools that had been boarding schools. Between 1933 and 1941 the total number of day schools rose from 132 to 226, enrollment in day schools more than tripled, and the number of students in day schools in 1941 exceeded the number in boarding schools.

Collier and his Education Director, Willard Beatty, further sought to reform the teaching practices and curriculum of Indian education. They relaxed the rigid discipline and other practices of boarding schools that had been borrowed from the military. Vocational education was reoriented from the needs of urban job markets to provide skills that could be employed on reservations themselves, recognizing that many Indians eventually returned to the reservation. Courses were introduced in Indian history and culture. The Santa Fe Boarding School became the leader in providing training in art for Indian students. Although the practice and study of Indian religion had traditionally been strongly discouraged in Indian schools, official policy in this regard was reversed in the 1930s. To be sure, in all these areas changes came slowly, as many BIA educators clung to the assumptions and attitudes of the earlier era.

Another important development was the more favorable attitude towards Indian language introduced by Collier and his fellow New Dealers. They reversed previous policies against use of Indian languages in schools, sought teachers able to speak Indian languages, developed reading materials in tribal languages, and sought to introduce programs of bilingual education. Bilingual education exemplifies the pluralistic philosophy of the New Dealers. Indian education was not to provide a knowledge of Indian culture alone or of non-Indian culture alone, but to emphasize both. If successful, Indians should be prepared to function equally well in their own tribal societies and in non-Indian society, despite the great differences that often existed. As Margaret Szasz writes:

> Despite the pervasiveness of monocultural instruction, Beatty still believed that it was possible for the Indian Service to pursue a bicultural approach to education. It should be the "task" of Indian Service teachers, he asserted, to conserve the "original background of native culture when it exists," and "to introduce ... an economic and cultural understanding of ... white neighbors and associates." This dream was also shared by Commissioner Collier. Although Collier walked the thin line between proponents of assimilation and proponents of preservation of heritage, he too believed that the Indian could achieve a balance between these two seemingly contradictory ways of life.
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> Beginning in his days as a reformer, Collier dedicated himself to defense of this principle. Three years after he took office, he wrote "Assimilation and preservation and intensification of heritage are not hostile choices, excluding one another, but are interdependent through and through." In concurrence with this statement one of the staff members at Haskell Institute described Collier's program as one that looked "both forward and backward." In other words, he said, "It looks backward and utilizes customs, tribal lore and history and looks to the future for an integration of these into the world of science and industry." Both Beatty and Collier recognized that their aims conflicted with almost all of the earlier goals of the Indian Service. However, at least in the 1930s, they did not seem to regard their goal--that the Indian child choose the best of both worlds --unattainable.[8]

Although the administrators of the BIA education system no longer sought Indian assimilation as an exclusive goal, other factors were moving towards greater emphasis on assimilation. By 1930, only 39 percent of the total enrollment of Indian children attended BIA schools. The majority, 53 percent, instead attended local public schools. The Federal government at first paid individual local schools and governments directly for part of the cost of Indian enrollments in public schools. Yet, dealing with many individual school districts was administratively cumbersome and complex. In 1934 the Johnson-O'Malley Act was enacted, providing for direct Federal contracts with State governments for the public school education of those Indian children living on non-taxable lands.

In 1950, Congress enacted broader legislation to provide Federal assistance to public schools that faced financial burdens as a result of the presence of non-taxable Federal lands and facilities. This Act was amended in 1953 to allow payment of "impact aid" to schools serving Indian students. By the 1960s, funding through impact aid had become the leading source of Federal support for public school education of Indians. For states receiving such funding, the Johnson-O'Malley program was limited to providing assistance in special curriculum and other program areas aimed specifically to meet Indian needs.

The plans of the New Deal reformers faced the great obstacle of having to overcome a long history of BIA education with contrary aims. Inevitably, there was great bureaucratic inertia and much resistance. While the New Dealers were able to implement some elements of their plans, their efforts were further short-circuited by World War II. When the war ended, a new mood was emerging in American politics. By the 1950s, there would be a return of government policy to the old aim of Indian assimilation and termination of the special trust relationship of tribes with the Federal government. The BIA, for example, in 1952 closed all its schools in the states of Idaho, Michigan, Washington, and Wisconsin. The long-term BIA goal in the 1950s was to transfer students, wherever possible, to public schools.

However, important efforts were also made in some areas to expand BIA schooling. In 1953, there were still 14,000 Navajo children not in school at all. In the 1950s the BIA, supported by increased Congressional funding, carried out an emergency program to redress this problem, in a few years succeeding in creating space for more than 10,000 additional Navajo children. The BIA also laid the groundwork for a major program of new school construction that was carried out in the early 1960s.

Education and Indian Self-Determination

Although the New Dealers had a much more favorable view of Indian culture, they were still like their predecessors in that the actual practices of Indian education were determined by the beliefs and policy decisions of non-Indians. The missionaries and other reformers of the 19th century had sought to do what they thought was best for the Indians; now Collier and his associates similarly sought to do what they thought was best. The difference was that the 19th century Christian reformers were certain that all men should live as they did; by contrast, Collier believed that a plurality of ways of living were equally valid and desirable for non-Indian and Indian alike. Neither Collier nor the 19th century reformers, however, made great efforts to find out what Indians themselves preferred. In fact, there would no doubt have been a considerable diversity of opinion among the many Indian tribes.

The distinguishing feature of the period since 1960 has been the drive to Indian self-determination. Indians have sought for the first time to take control of their own affairs, including the education of their children. The philosophy of self-determination prescribes that questions of assimilation, bicultural lifestyles, the values and beliefs taught in the schools, and many others should be resolved primarily within each tribal

community, rather than largely by outside forces. To be sure, movement towards self-determination has often been slow and gradual. In some cases the BIA has resisted the loss to tribes of its past role and authority in the oversight and operations of education programs. In other cases tribes themselves have been uncertain of their own administrative and other capabilities, causing them to be cautious in assuming command of their affairs. Tribes have also feared that with self-determination may come a demand that tribes pay their own way, that self-determination could lead to declining Federal financial support or could even be a disguised form of termination.

In the field of education a key step toward self-determination was the founding of the first federally-funded school whose management was contracted out to tribal managers. The Rough Rock Demonstration school was established in 1966 on the Navajo Reservation as a contract school, supported by the BIA and the Office of Economic Opportunity. The first college controlled by Indians was also established on the Navajo reservation, the Navajo Community College, founded in 1968. At the direction of President Johnson, the BIA sought to form school boards of Indian parents. While having only advisory responsibilities, such boards by 1969 were functioning in many BIA schools.

Along with the movement towards Indian self-determination, another major influence on Indian education in the 1960s was the Federal war on poverty. Certainly, the two were mutually reinforcing. The administrators of poverty programs proved more willing than the BIA had usually been to grant Indian control and management. The experience of participating in and controlling poverty programs encouraged Indian leadership to extend this approach to BIA programs and other areas of Indian affairs. The poverty programs also provided major infusions of funds to Indian reservations. For example, the enactment of Chapter 1 of the Elementary and Secondary Education Act of 1965 provided significant new funds for the education of disadvantaged children, including many Indian children. In 1970, Chapter 1 provided $11.7 million in direct support of Indian education, a level of support which reached $24 million in 1987.

Senator Robert Kennedy and then, after his death, Senator Edward Kennedy, chaired the Senate Special Subcommittee on Indian Education. Its report, issued in 1969, constituted the most complete review of Indian education sponsored by the government since the Meriam Report. The Senate Report concluded that "our national policies for educating Indian children are a failure of major proportions. They have not offered Indian children--either in years past or today--an educational opportunity anywhere near to that offered the great bulk of American children." The Senate Report found that the curriculum, facilities, personnel and other aspects of Indian education fell far short of what was needed. It recommended much increased participation and control by Indians of the education of their children.

The poverty concerns, research studies and other groundwork laid in the 1960s spurred the enactment in the 1970s of three major pieces of legislation directed to improve the quality of Indian education. The first was the Indian Education Act of

1972 (P.L. 92-318). It established an Office of Indian Education in the Department of Health, Education, and Welfare (now located in the Department of Education), which created an important Federal role in overseeing Indian education for the first time outside BIA. Part A of the Indian Education Act established a set of per capita payments to be made to schools--public and BIA tribally contracted--for each Indian child. Parts B and C established a set of grant programs for the purpose of furthering bilingual education, culturally relevant curriculum and other special needs of Indian education. In 1975, $40.0 million was provided under the Indian Education Act in support of Indian education; spending under the Act reached $62.0 million in 1986. The Act also included new provisions for Indian participation and direction of government actions in several areas. Szasz writes that "Indian control ... was the major feature that distinguished [the Act] ... from earlier legislation."[9]

In 1975, Congress enacted another major piece of legislation affecting Indian education, the Indian Self-Determination and Education Assistance Act (P.L. 93-638). Education was included within the broader scope of the Act providing for and encouraging the contracting out of BIA functions to Indian tribes themselves. The long run goal set by the Act was the assumption by the tribes of managerial and policymaking responsibilities for their own affairs. By 1987, Indian children in contract schools represented 27.8 percent of the total enrollment in BIA-funded schools.

The third major piece of education legislation in the 1970s was Title XI of the Education Amendments Act of 1978 (P.L. 95-561). This Act went further in promoting Indian self-determination, stating that "it shall be the policy of the Bureau, in carrying out the functions of the Bureau, to facilitate Indian control of Indian affairs in all matters relating to education." The Act also directed that BIA should fund schools according to an Indian school equalization formula designed to achieve an equitable distribution (now known as the ISEP formula, essentially a weighted per capita distribution). The 1978 Act mandated the development of a set of uniform education standards to be established for all BIA and contract schools. The hiring of teachers and other personnel was revised to put them on a direct contract basis with each school, effectively removing BIA education from many of the procedural and other requirements of the nationwide Federal civil service system. Local school boards of Indian parents were assigned to play a much expanded role in personnel decisions.

The 1978 Act also required the reorganization of the BIA with respect to the administration of its schools. The 12 BIA area offices, each located in an administrative region, were largely removed from a direct administrative role in the BIA education system. Instead, Congress instructed that the lines of authority should run from the school to the BIA Agency (education) and then to the Office of Indian Education Programs, located at BIA headquarters in Washington, D.C. The purpose of this change was to loosen the reins of tight control over education previously exercised by BIA Area offices, which critics believed had inhibited tribal efforts to achieve greater self-determination. Now, some tribes have accused several education Agency offices of being as unresponsive as Area offices.

Another important piece of legislation of the 1970s affecting Indian education was the Education of the Handicapped Act of 1975. This Act provided a major new source of funds for the "special education" programs for handicapped students now found in schools throughout the United States. By 1987, the Department of Education was providing $16.5 million directly to the BIA school system for special education. The Tribally Controlled Community College Act of 1978 provided for grants for students attending community colleges that are governed by an Indian board.

The 1980s thus far have been a decade with fewer legislative changes and more effort devoted to consolidating and implementing the legislative initiatives of the 1970s. The net effect of the many changes of the past two decades has been a redirection of the BIA system towards a much greater role for tribal input. This role is now seen at all levels of the system, ranging from tribal consultations with Congressional leadership at the national level to tribal consultations with and management of individual schools at the local level. The number of Indian operated schools under contract to the BIA continued to rise, if more slowly than in the 1970s. Part of the problem, tribal leaders argue, is that BIA has not consistently operated in good faith in implementing Public Law 95-561.

The Future of BIA Education

The movement towards self-determination has not changed the basic questions that have long confronted Indian education. Self-determination has simply meant that Indians would have a much greater role in answering them. These questions include the degree to which Indian education should seek to teach the work habits, intellectual interests, history and other elements of the mainstream non-Indian culture. Or how much should Indian education teach the beliefs, history, language and culture of the Indian tribe itself? Should Indian education be seen as the means of exposure of Indian children to the beliefs and values of the outside, non-Indian world, leaving Indian culture itself to other tribal institutions? Or should Indian education taking place in the classroom become the vehicle for teaching tribal values and culture? What precisely constitute tribal values and culture, given the vast changes that have occurred in the lives, customs and beliefs of American Indians over the past few centuries?

Self-determination means that it is unlikely that any single set of answers to questions of this sort will emerge. The essence of self-determination is that the answers will be left to individual Indians and tribes to be worked out in their own way. Given the great diversity of Indian views, a wide variety of responses is to be expected.

The role of the BIA in Indian education has been and will continue to be greatly affected by the developments of the past two decades. The BIA is no longer expected to provide a common system of education that provides a uniform set of answers to the questions of Indian education--as it was, for example, in past eras where Indian assimilation and education in mainstream culture were the unquestioned objective. The BIA system has thus become more decentralized, leaving much more to be deter-

mined at the tribal and individual school level with little operational oversight and control being provided at the national level. It must be emphasized that the BIA has at times been slow to recognize and adjust to these changing realities.

Yet, even in an era of self-determination, the Congress has shown that it is not willing to defer entirely to tribal prerogatives. It has required uniform Federal standards for all BIA-operated schools, which now include, for example, mandatory State certification for teachers in BIA-operated schools. The BIA itself has recently begun a nationwide program of testing of all students in the schools it funds. As long as the Federal government pays the bills, it is perhaps inevitable that some oversight--some demands for accountability to Federal administrators--will continue.

The future of the BIA education system may also be closely linked to the future of Indian education in public schools. The public schools could increase their already large role in Indian education. Alternatively, Indian education could move away from public schools and towards tribal education. Perhaps the movement for self-determination will eventually result in the development of tribal school systems. These systems might even come to be seen as Indian versions of the Departments of Education found in the states. Between these two possibilities, will there still remain a role in the long run for a system of education run by the BIA? Or will BIA perhaps become largely a grant-making and funding organization, one that is concerned primarily with the ways in which others spend its money?

The administrative and organizational requirements of the BIA education system will vary greatly, depending on the answers that are eventually reached to these issues. The final answers will be learned, however, more in the long run than the short run.

This report on BIA education is not intended to develop detailed prescriptions. It seeks to present materials and options that will serve the purposes of an informed discussion and continuing exchange of views among the many parties involved. The future of BIA education will not and cannot be resolved in any one set of decisions or even in the space of a few years. The current state of the BIA education system will be described and analyzed in this report and various options for the future presented and explored.

FOOTNOTES TO CHAPTER I

1. Information on the history of Indian education for Chapter I was obtained from a variety of sources:

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Murray L. Wax, *Indian Americans: Unity and Diversity* (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1971).

2. Cited in Prucha, *The Great Father,* p. 136.

3. Prucha, *The Great Father,* p. 146.

4. Prucha, *The Great Father,* p. 696.

5. Cited in Prucha, *The Great Father,* p. 703.

6. Lewis Meriam, et. al., *The Problem of Indian Administration* (Baltimore: Johns Hopkins Press, 1928).

7. Berkhofer, Jr., *The White Man's Indian,* p. 178.

8. Szasz, *Education and the American Indian,* p. 76.

9. Ibid., p. 199.

CHAPTER II

Enrollment Trends in BIA Education

From 1880 to 1930

The creation of the reservation system in the late nineteenth century and the adoption of a policy of Indian assimilation led to a major expansion of the Indian education system. The new commitment to the education of indigenous Americans resulted in an increase of Federal expenditures for Indian education from $75,000 in 1880 to $1.37 million in 1890 and then to $2.94 million in 1900--an increase of 40 times in two decades. By 1930, Federal expenditures for Indian education reached $9.17 million, or $284 per Indian student (adjusted for inflation, the equivalent in 1986 dollars of $2,227 per student).

With increasing expenditures came increasing numbers of schools. As shown in Table 1, the number of Indian schools rose from 109 day schools and 60 boarding schools

TABLE 1

NUMBERS OF INDIAN SCHOOLS AND ENROLLMENTS OF INDIAN STUDENTS BY TYPE OF SCHOOL AND YEAR

Year	Number of Schools[1]			Federal Sch. Enrollment[2]			Mission& Private[3]	Public School[4]	All Schools
	Day	Boarding	Total	Day	Boarding	Total			
1880	109	60	169	N/A	N/A	7,000+	N/A	N/A	7,000+
1890	106	140	206	3,967	12,410	16,377	N/A	N/A	16,377
1900	154	153	307	5,120	19,810	24,930	1,275	246	26,451
1911[5]	227	156	383	6,121	19,912	26,033	2,739	10,625	39,397
1920	204	143	347	5,765	21,659	27,424	3,518	30,858	61,800
1930	150	136	286	3,983	28,333	32,316	3,358	34,775	70,449

[1]Federally-administered schools plus mission and private Indian schools, with and without Federal contracts.
[2]Federally-administered plus mission and private schools with Federal contracts.
[3]Mission and private Indian schools without Federal contracts.
[4]Indian students attending public schools and living within the administrative jurisdictions of the Bureau of Indian Affairs.
[5]Data for 1911 used because comparable 1910 data were unavailable.

Source: Annual Reports of the Commissioner of Indian Affairs, U.S. Department of the Interior.

in 1880 to 227 day schools and 156 boarding schools in 1911. Subsequently, the total number of schools declined to 286 in 1930, largely because of consolidations that increased the average number of students per school. The enrollment of Indians in Federally-funded schools (both those directly operated by the Federal government and those supported by Federal contracts) rose most sharply from 1880 to 1900--as seen in Table 1, from 7,000 + students to 24,930 students in those two decades. Thereafter, Indian enrollment in Federal schools rose much more gradually, reaching a level of 32,316 students in 1930.

However, because public schools began to absorb large numbers of Indian students, total Indian enrollments continued to rise sharply. From a very few students at the turn of the century, Indian enrollment in public schools (among Indians living in areas of BIA service responsibility) climbed to 34,775 students by 1930. There was also a small growth in enrollment of Indians in mission and private schools. Thus, by 1930 the total Indian enrollment had reached 70,449 students, about 10 times what it had been a half century earlier. Indian enrollment was divided about equally between Federal and public schools--with a further contribution of about 5 percent from mission and private schools (those without Federal contracts).

As a result of this expansion of Indian education, the number of Indian children classified by the government as eligible for school, but nevertheless not in school, declined from 27,814 children in 1911 to 12,802 children in 1930. Relative to the total population of eligible Indian children, the percentage not in school declined from 41 percent in 1911 to 15 percent in 1930.

From 1930 to 1988

A new era in Indian policy and Indian education commenced with the New Deal. Indian education shifted to try to meet new policy goals, putting a greater emphasis on serving the needs of reservation life. The new era also brought changes in statistical procedures for reporting of school enrollments and other educational matters. After 1930 annual BIA reports ceased to show numbers of schools (until 1952) and also ceased to show contract schools (until 1973).

As seen in Table 2, the total number of schools in the BIA system (outside Alaska) was almost the same in 1952 as it had been in 1930. There was a shift between 1930 and 1952 towards a greater proportion of day schools relative to boarding schools. After 1952, the total number of schools fell to 141 in 1970, including 68 day schools and 73 boarding schools. In subsequent years the total number of BIA and contract schools rose somewhat, in the years from 1975 to 1988 remaining at levels between 150 and 175 schools (excluding dormitories as well as Alaska schools).

Table 2 (and most of following tables in this chapter) excludes Alaska schools in order to maintain comparability with the current BIA school system. The State of Alaska assumed responsibility in the early 1980s for Alaska Native education in the State, leaving no BIA or federally-contracted schools there. As recently as 1979, there had

TABLE 2

NUMBERS OF BIA-FUNDED ELEMENTARY AND SECONDARY SCHOOLS
BY TYPE AND YEAR, EXCLUDING PERIPHERAL DORMITORIES AND ALASKA SCHOOLS

Year	BIA-Operated Schools[1]			Contract Schools[2]			BIA-Funded Schools			Percent Contract		
	Day	Boarding	Total	Day	Boarding	Total	Day	Boarding	Total	Day	Boarding	All Schools
1930	131	80	211[3]	0	22	22	131	102	233	0	21.57	9.44
1952	140	72	212[3]	N/A	N/A	N/A	140	72	212	N/A	N/A	N/A
1960	105	74	179	N/A	N/A	N/A	105	74	179	N/A	N/A	N/A
1965	83	75	158	N/A	N/A	N/A	83	75	158	N/A	N/A	N/A
1970	68	73	141	N/A	N/A	N/A	68	73	141	N/A	N/A	N/A
1973	63	71	134	8	4	12	71	75	146	11.27	5.33	8.22
1974	63	72	135	9	4	13	72	76	148	12.50	5.26	8.78
1975	63	72	135	10	5	15	73	77	150	13.70	6.49	10.00
1976	64	70	134	11	9	20	75	79	154	14.67	11.39	12.99
1977	63	65	128	17	10	27	80	75	155	21.25	13.33	17.42
1978	61	64	125	22	12	34	83	76	159	26.51	15.79	21.38
1979	62	64	126	21	13	34	83	77	160	25.30	16.88	21.25
1980	67	53	120	31	7	38	98	60	158	31.63	11.67	24.05
1981	63	54	117	41	7	48	104	61	165	39.42	11.48	29.09
1982	62	55	117	48	9	57	110	64	174	43.64	14.06	32.76
1983	61	55	116	49	9	58	110	64	174	44.55	14.06	33.33
1984	59	54	113	50	9	59	109	63	172	45.87	14.29	34.30
1985	57	50	107	50	11	61	107	61	168	46.73	18.03	36.31
1986	56	49	105	51	10	61	107	59	166	47.66	16.95	36.75
1987	56	46	102	54	11	65	110	57	167	49.09	19.30	38.92
1988	57	46	103	54	11	65	111	57	168	48.65	19.30	38.69

[1]The years 1940 and 1950 could not be shown because BIA annual reports did not give numbers of schools in these years. All Alaska, postsecondary schools and peripheral dormitories are excluded. Schools with mixes of boarding and day students shown as boarding schools.

[2]Following 1930, BIA did not report numbers of contract schools until 1973. In 1930, contracts were signed for Indian education with mission and private schools. The first contract with an Indian group was signed in 1966. Contract schools reported in 1973 and subsequent years involve contracts with Indian groups.

[3]The 1930 and 1952 BIA counts of schools may be higher than the correct totals, as the source does not contain a separate count for dormitories.

Sources: Data obtained from BIA unpublished sources (FY 1980-88); BIA Statistics Concerning IndianEducation (FY 1952-1979); Annual Reports of the Commissioner of Indian Affairs (FY 1930,1940). All Alaska schools, postsecondary schools and dormitories are excluded.

been 44 BIA day schools and one BIA boarding school in Alaska, together having a total enrollment of 3,204 students. Table 2 also excludes peripheral dormitories that the BIA provides in order to permit the dormitory residents to attend nearby public schools. There were a total of 14 such BIA and contract dormitories in 1988, serving 1,675 Indian students attending public schools.

Table 2 and other tables in this chapter further exclude post-secondary education. The BIA operates three postsecondary schools, the Haskell Indian Junior College (in Lawrence, Kansas), the Institute of American Indian Arts (in Santa Fe), and the Southwestern Indian Polytechnic Institute (in Albuquerque). In 1985, there were 1,965 students enrolled in these three post-secondary schools. In mid-1988, the Institute of American Indian Arts will become a Congressionally chartered institution similar to Howard University in Washington, D.C. and no longer funded by BIA.

In 1966, the BIA signed its first contract with an Indian group for the operation of an Indian school. The BIA did not, however, begin to report the numbers of contract schools until 1973, when 12 such schools were in existence. In the years since 1973, the number of contract schools has grown significantly, climbing most rapidly in the period from 1976 to 1982. As shown in Table 2, by 1988 the total number of contract schools was 65, equal to 39 percent of all schools supported by BIA funds. Unlike the contract boarding schools supported by BIA earlier in this century, most contract schools today are day schools. In 1988, 54 out of the 65 contract schools, or 83 percent, were day schools. Within the overall BIA system of federally-funded schools, contract schools by 1988 represented almost 50 percent of the total number of day schools.

As shown in Table 3, the enrollment in BIA-funded schools outside Alaska remained below 30,000 students from 1930 to 1960. Enrollment then climbed significantly in the 1960s, reaching 36,209 students in 1970. From that level, total numbers of students in the BIA-funded system fell for several years and then rose again sharply, reaching an all-time high of 40,178 in 1977. Since then, total enrollment has been fairly stable, if declining slightly. In 1988, the total number of students in BIA-funded schools was 37,917, almost the same level that it had been in 1976 (and recalling again that the effects of the early 1980s loss of Alaska enrollments are excluded).

However, the numbers of students in those Indian schools that are operated directly by the BIA has declined, falling from 36,209 students in 1970 to 34,672 students in 1976 and then to 26,715 students in 1988, the lowest level since the 1930s. Because the overall numbers of students in all BIA-funded schools remained fairly stable, the declines in students in BIA-operated schools had to be accompanied by increases in enrollments in contract schools. As shown in Table 3, Indian enrollment in contract schools has indeed risen from 2,299 students in 1973 to 11,202 students in 1988. More than 80 percent of the enrollment in contract schools is in day schools, compared to a 66 percent day enrollment for BIA-operated schools. By 1988, contract schools enrolled 34 percent of all day students in the BIA-funded system, compared with 19

TABLE 3

NUMBERS OF INDIAN CHILDREN ATTENDING BIA-FUNDED ELEMENTARY AND SECONDARY SCHOOLS, EXCLUDING PERIPHERAL DORMITORIES AND ALASKA SCHOOLS

Year	BIA-Operated Schools [1]			Enrollment in Contract Schools [2]			BIA-Funded Schools			Percent Contract		
	Day	Boarding	Total	Day	Boarding	Total	Day	Boarding	Total	Day	Boarding	All Students
1930[3]	3,649	21,416	25,065	0	2,727	2,727	3,649	24,143	27,792	0	11.30	9.81
1940[3]	15,917	11,419	27,336	N/A	N/A	N/A	15,917	11,419	27,336	N/A	N/A	N/A
1952	12,541	15,806	28,347	N/A	N/A	N/A	12,541	15,806	28,347	N/A	N/A	N/A
1960	10,729	18,684	29,413	N/A	N/A	N/A	10,729	18,684	29,413	N/A	N/A	N/A
1965	11,235	24,051	35,286	N/A	N/A	N/A	11,235	24,051	35,286	N/A	N/A	N/A
1970[4]	12,961	23,248	36,209	N/A	N/A	N/A	12,961	23,248	36,209	N/A	N/A	N/A
1973	14,363	19,169	33,532	1,799	500	2,299	16,162	19,669	35,831	11.13	2.54	6.42
1974	14,229	18,804	33,033	1,896	573	2,469	16,125	19,377	35,502	11.76	2.96	6.95
1975	12,605	16,712	29,317	1,918	881	2,799	14,523	17,593	32,116	13.21	5.01	8.72
1976	15,449	19,223	34,672	2,890	924	3,814	18,339	20,147	38,486	15.76	4.59	9.91
1977	16,168	17,463	33,631	5,371	1,176	6,547	21,539	18,639	40,178	24.94	6.31	16.29
1978	16,528	17,054	33,582	5,380	1,318	6,698	21,908	18,372	40,280	24.56	7.17	16.63
1979	17,055	15,844	32,899	5,066	1,346	6,412	22,121	17,190	39,311	22.90	7.83	16.31
1980	N/A	N/A	29,928	5,002	1,784	6,786	N/A	N/A	36,714	N/A	N/A	18.48
1981	N/A	N/A	29,074	5,687	1,819	7,506	N/A	N/A	36,580	N/A	N/A	20.52
1982	15,692	14,297	29,989	7,319	1,268	8,587	23,011	15,565	38,576	31.80	8.15	22.25
1983	16,484	14,004	30,488	7,519	1,324	8,843	24,003	15,328	39,331	31.32	8.64	22.48
1984	17,637	13,596	31,233	7,447	1,273	8,720	25,084	14,869	39,953	29.68	8.56	21.82
1985	16,136	12,394	29,530	7,789	2,185	9,974	24,925	14,579	39,504	31.24	14.98	25.24
1986	17,412	11,216	28,628	7,865	1,982	9,847	25,277	13,198	38,475	31.11	15.01	25.59
1987	17,758	9,870	27,628	8,564	2,080	10,644	26,322	11,950	38,272	32.53	17.40	27.80
1988	17,589	9,126	26,715	9,064	2,138	11,202	26,653	11,264	37,917	34.00	19.00	29.54

[1]All Alaska, postsecondary students and BIA peripheral dormitory residents attending public schools are excluded. Based on student attendance as counted during offical count weeks. Prior to 1976, based on average daily attendance (ADA). Boarding attendance includes actual boarders only. Day students at boarding schools are counted as day students.

[2]Contract enrollment for 1930 consists of contracted mission and private schools. BIA sources do not show contract enrollment in 1940 and following years until 1973. Contract enrollment in 1973 and subsequent years involves contracts with Indian groups. The first such contract was signed in 1966.

[3]The 1930 and 1940 references (see sources) do not show separate enrollment counts for dormitories. As a result, the 1930 and 1940 Boarding BIA count may include some children living in BIA dormitories and attending public school.

[4]BIA enrollment for 1970 includes a small but unknown number of students in contract schools.

Sources: Data obtained from BIA unpublished sources (FY 1980-88); BIA Statistics Concerning Indian Education (FY 1952-1979); Annual Reports of the Commissioner of Indian Affairs (FY 1930, 1940).

percent of all boarding students. Overall, 30 percent of the students in the BIA-funded system were enrolled in contract schools.

Boarding schools include both day students and those who actually reside at the boarding school, living in dormitory facilities. In 1979, for example, there were 22,302 students enrolled in BIA-operated boarding schools outside Alaska. However, only 15,844 were actually boarding students who lived at the school. The remaining 6,458 students attended the boarding school during the day, but lived at home.

The numbers of boarding students shown in Table 3 represent actual boarders who lived in residence facilities at the school. Reflecting a BIA policy to promote day schools, the number of boarding students has declined steadily. In 1965, there were 24,051 boarding students in BIA-funded schools, a figure which fell to 18,372 in 1978, to 15,328 in 1983, and most recently to 11,264 in 1988. Boarding students have declined from 68 percent of students in 1965 to 30 percent of students in BIA-funded schools in 1988.

At the same time, the numbers of day students have risen from 11,235 in 1965 to 26,653 day students in 1988. Day students in 1988 represented 70 percent of total enrollment, compared with less than 50 percent as recently as 1976.

The great majority of boarding schools are located on reservations and serve reservation students. However, there were seven off-reservation boarding schools operating in 1987, survivors from an era when off-reservation boarding schools were a main component of BIA education. The total 1987 enrollment in off-reservation boarding schools was 2,647 students. In off-reservation boarding schools such as Chemawa High School in Oregon and Sherman High School in California, almost all the students come from other states and there is a great mix of tribal origins and backgrounds.

The Distribution of Schools and Students in 1987

The evolution of the BIA system of education has resulted in a system concentrated in four states: Arizona, New Mexico, North Dakota and South Dakota. In 1987, 31,794 students were enrolled in these four states in the system of BIA-funded schools--83 percent of the total enrollment of this system. As shown in Table 4, Arizona alone contained 13,390 students in BIA-funded schools, equal to 35 percent of all students in such schools. New Mexico contained 9,448 students or 25 percent of the students in the BIA-funded system. South Dakota contained 5,611 students, or 15 percent of the BIA-funded system, and North Dakota contained 3,345 students or 9 percent of the BIA-funded system. Only 10 percent of enrollment in the BIA-funded system was found east of the Mississippi River.

The Navajo Tribe had more students enrolled in 1987 in BIA-funded schools than any other tribe. Indeed, fully 43 percent of all students in the BIA system were from the Navajo Tribe 9,756 students in Arizona and 6,651 students in New Mexico. Ex-

TABLE 4

FY 1987 TOTAL NUMBER OF STUDENTS IN BIA-FUNDED SCHOOLS, BY GRADE AND REGION[1]

Region	BIA-Operated			Contract			Cooperative			Total BIA-Funded		
	K-8	9-12	All Grades	K-8	9-12	All Grades	K-8	9-12	All Grades	K-8	9-12	All Grades
Navajo AZ	7,544	469	8,013	1,076	667	1,743	0	0	0	8,620	1,136	9,756
Other AZ	2,272	792	3,064	425	0	425	145	0	145	2,842	792	3,634
Total AZ	**9,816**	**1,261**	**11,077**	**1,501**	**667**	**2,168**	**145**	**0**	**145**	**11,462**	**1,928**	**13,390**
Pueblo NM	1,947	0	1,947	142	341	483	0	0	0	2,089	341	2,430
Navajo NM	4,879	816	5,695	535	421	956	0	0	0	5,414	1,237	6,651
Other NM	0	0	0	257	110	367	0	0	0	257	110	367
Total NM	**6,826**	**816**	**7,642**	**934**	**872**	**1,806**	**0**	**0**	**0**	**7,760**	**1,688**	**9,448**
South Dakota	849	838	1,687	1,873	728	2,601	1,034	289	1,323	3,756	1,855	5,611
North Dakota	748	164	912	603	419	1,022	1,377	34	1,411	2,728	617	3,345
Other West	345	1,080	1,425	748	475	1,223	0	0	0	1,093	1,555	2,648
East (of MS River)	1,574	533	2,107	1,188	545	1,733	0	0	0	2,762	1,078	3,840
All Regions	**20,158**	**4,692**	**24,850**	**6,847**	**3,706**	**10,553**	**2,556**	**323**	**2,879**	**29,561**	**8,721**	**38,282**

[1]Numbers of students shown include only Instructional enrollment (Peripheral dormitory residents are excluded). No Alaska schools included in count as all Alaska Federal schools were closed down by 1985. The total Federal enrollment of 38,282 above differs from BIA's total Federal enrollment of 38,285 (used for BIA funding purposes). The discrepancy is due to the non-indication by a few students of their sex in the BIA count, affecting the data base used in this table which counts individual students by sex and grade.

Source: Comprehensive BIA Schools Report (FY 1987).

cluding contract and cooperative schools, the Navajo Tribe by itself contained the majority--55 percent--of the total students in schools directly operated by the BIA in 1987. Even though the first modern contract school was located on the Navajo Reservation, the Navajo Tribe had only 26 percent of the total 1987 enrollment in contract schools.

Among the four major states, the highest rate of contracting in 1987 was found in South Dakota, where 46 percent of students in the BIA-funded system attended a contract school. Contract schools in 1987 contained 16 percent of the BIA system enrollment in Arizona, 19 percent in New Mexico, and 27 percent in North Dakota. Enrollment in a contract school was also much more likely in grades nine through twelve ("9-12" schools) than in kindergarten through grade eight ("K-8"). Contract schools represented 42 percent of the former, as compared with 23 percent of the latter.

However, the BIA system as a whole serves relatively greater numbers of students in grades K-8. Many students go on to a public school after graduating from a BIA or contract elementary school. Thus, in 1987, grades K-8 contained 77 percent of all the students in the BIA-funded system. Within schools administered directly by the BIA, grades K-8 contained 81 percent of all students. Although elementary and secondary Pueblo students constitute 8 percent of the total students in BIA-operated schools, there were no BIA-operated schools for grades 9-12 designed specifically to serve Pueblo students and only one such contract school.

Cooperative schools, BIA school programs sharing resources with nearby public schools, in 1987 were found mainly in North Dakota and South Dakota. In North Dakota students attending cooperative schools represented 42 percent of total Indian enrollment in the BIA-funded system. Given the substantial use of contract schools in these states, the schools operated directly by the BIA contained only 30 percent of South Dakota students in the BIA system and 27 percent of North Dakota students.

As shown in Table 5, there were 7,678 Navajo students attending boarding schools in 1987, representing 47 percent of all Navajo students--as compared with 31 percent of all students in the BIA-funded system. Navajo boarding students constituted fully 64 percent of all boarding students. By contrast, only 19 percent of Pueblo students attended boarding schools in 1987. Fewer boarding students also are found in the Dakotas--22 percent in South Dakota and 9 percent in North Dakota.

At younger ages, Indian children are more likely to attend a BIA-operated school rather than a contract school, and this school is more likely to be a day school. Thus, as shown in Table 6, a total of 8,234 students were attending a BIA-operated day school in 1987 in grades K-3--representing 22 percent of all students in BIA-funded schools. Day students constituted 85 percent of the total enrollment of students in grades K-3 in BIA-funded schools. By contrast, for grades 9-12, day students constituted 44 percent of the total BIA enrollment, while boarding students represented

TABLE 5

1987 TOTAL NUMBER OF STUDENTS IN BIA-FUNDED SCHOOLS, BY TYPE OF SCHOOL AND REGION[1]

Region	BIA-Operated			Contract			Cooperative			Total BIA-Funded		
	Day	Boarding	Total	Day	Boarding	Total	Day	Boarding	Total	Day	Boarding	Total
Navajo AZ	4,135	3,878	8,013	998	745	1,743	0	0	0	5,133	4,623	9,756
Other AZ	2,450	614	3,064	425	0	425	76	69	145	2,951	683	3,634
Total AZ	**6,585**	**4,492**	**11,077**	**1,423**	**745**	**2,168**	**76**	**69**	**145**	**8,084**	**5,306**	**13,390**
Pueblo NM	1,947	0	1,947	26	457	483	0	0	0	1,973	457	2,430
Navajo NM	2,834	2,861	5,695	762	194	956	0	0	0	3,596	3,055	6,651
Other NM	0	0	0	300	67	367	0	0	0	300	67	367
Total NM	**4,781**	**2,861**	**7,642**	**1,088**	**718**	**1,806**	**0**	**0**	**0**	**5,869**	**3,579**	**9,448**
South Dakota	978	709	1,687	2,191	410	2,601	1,186	137	1,323	4,355	1,256	5,611
North Dakota	615	297	912	1,022	0	1,022	1,411	0	1,411	3,048	297	3,345
Other West	171	1,254	1,425	1,010	213	1,223	0	0	0	1,181	1,467	2,648
East (of MS River)	2,041	66	2,107	1,733	0	1,733	0	0	0	3,774	66	3,840
All Regions	**15,171**	**9,679**	**24,850**	**8,467**	**2,086**	**10,553**	**2,673**	**206**	**2,879**	**26,311**	**11,971**	**38,282**

[1]Numbers of students shown include only Instructional enrollment (Peripheral dormitory residents are excluded). No Alaska schools included in count as all Alaska Federal schools were closed down by June 1985. The total Federal enrollment of 38,282 above differs from BIA's total Federal enrollment of 38,285 (used for BIA funding purposes). The discrepancy is due to the non-indication by a few students of their sex in the BIA count, affecting the data base used in this table which counts individual students by sex and grade.

Source: Comprehensive BIA Schools Report (FY 1987)

TABLE 6

NUMBER OF STUDENTS IN 1987 IN BIA-FUNDED SCHOOLS, BY GRADE AND TYPE OF SCHOOL[1]

Type of School	Number of Students K-3	4-8	9-12	All Grades
Day BIA-Operated	8,234	5,673	1,264	15,171
Boarding BIA-Operated	2,140	4,111	3,428	9,679
All BIA-Operated	**10,374**	**9,784**	**4,692**	**24,850**
Day Contract	3,253	2,874	2,340	8,467
Boarding Contract	128	592	1,366	2,086
All Contract	**3,381**	**3,466**	**3,706**	**10,553**
Day Cooperative	1,299	1,103	271	2,673
Boarding Cooperative	54	100	52	206
All Cooperative	**1,353**	**1,203**	**323**	**2,879**
Total Day	12,786	9,650	3,875	26,311
Total Boarding	2,322	4,803	4,846	11,971
All Students	**15,108**	**14,453**	**8,721**	38,282

[1]Numbers of students shown include only instructional enrollment (excludes peripheral dormitory residents). No Alaska schools included in count as all Alaska Federal schools were closed down by June 1985. The total Federal enrollment of 38,282 above differs from BIA's total Federal enrollment of 38,285 (used for BIA funding purposes). The discrepancy is due to the non-indication by a few students of their sex in the BIA count, affecting the data base used in this table which counts individual students by sex and grade.

Source: Comprehensive BIA Schools Report (FY 1987)

56 percent of the enrollment. For grades 9-12, only 54 percent of the students in the BIA-funded system attended a BIA-operated school.

Table 7 shows the number of students in 1987 for each grade within BIA-funded schools. In BIA-operated schools the largest number of students attend the first grade, equal to 12 percent of all enrollment in BIA-operated schools. By contrast, the enrollment in the 12th grade is only 4 percent of the total enrollment in BIA-operated schools. The sharp decline in BIA enrollment from the 1st grade to the 12th grade reflects two main influences. First, many Indian students drop out of school altogether before the 12th grade. Second, many other students who begin their education in a BIA school eventually transfer elsewhere, in most cases to a public school.

The largest number of Indian students in contract schools attend kindergarten, equal to 10 percent of all enrollment in contract schools. The falloff in enrollment in later grades is much less dramatic in contract schools, as compared with BIA-operated schools.

For almost every grade and type of school, there are slightly more male students than female students in BIA-funded schools. The reasons for this difference are presently unknown.

Indian Students in Public Schools

The system of BIA-funded schools represents only a limited part of the overall system of Indian education in the United States. The public schools play a major role in Indian education. Indeed, as shown in Table 8, the role of the public schools has increased steadily over time. Public school enrollment in areas of BIA service responsibility was 34,775 in 1930, rose to 77,262 by 1960, and reached 127,952 in 1977 (the last year for which BIA reported such figures). While enrollment in BIA-funded schools rose by 10,207 students from 1930 to 1977, the public schools in nearby areas were gaining 93,177 students.

As Table 9 shows, the percentage of enrollment by Indian students in BIA-funded schools fell from 38.8 percent in 1930 to 22.5 percent in 1977. Over the same period, Indian students attending public schools within BIA areas of service responsibility rose from 41.8 percent of all students to 67.7 percent. The share of mission and other private schools never rose above 10 percent in the years from 1930 to 1977. By 1977, the entire system of BIA-funded, public school and private education was covering almost all Indian children. Only 4.1 percent were eligible for schooling but lacked access to schools.

The enrollment data contained in Tables 8 and 9 encompass only areas of BIA service responsibility. However, a growing number of Indian families live in urban areas and in states where BIA has no responsibilities. The great majority of Indian students from these families attend public schools. When Indian enrollment in public schools

TABLE 7

NUMBER OF STUDENTS IN 1987 IN BIA-FUNDED SCHOOLS,
BY SEX, GRADE AND TYPE OF SCHOOL[1]

Number of Students

Sex of Student and School	K	1	2	3	4	5	6	7	8	9	10	11	12	All Grades
Male, BIA-Operated	1,325	1,470	1,244	1,256	1,117	1,129	989	884	874	870	641	461	447	12,707
Female, BIA-Operated	1,303	1,427	1,208	1,141	1,136	1,010	990	827	828	738	598	507	430	12,143
All BIA-Operated	**2,628**	**2,879**	**2,452**	**2,397**	**2,253**	**2,139**	**1,979**	**1,711**	**1,702**	**1,608**	**1,239**	**968**	**877**	**24,850**
Male, Contract	561	434	376	332	359	326	290	417	394	573	484	450	399	5,395
Female, Contract	526	401	385	366	303	330	318	355	374	522	508	394	376	5,158
All Contract	**1,087**	**835**	**761**	**698**	**662**	**656**	**608**	**772**	**768**	**1,095**	**992**	**844**	**775**	**10,553**
Male, Cooperative	186	217	166	160	148	146	126	108	88	69	48	24	28	1,514
Female, Cooperative	169	172	147	136	150	128	125	78	106	63	33	32	26	1,365
All Cooperative	**355**	**389**	**313**	**296**	**298**	**274**	**251**	**186**	**194**	**132**	**81**	**56**	**54**	**2,879**
Total Male	2,072	2,121	1,786	1,748	1,624	1,601	1,405	1,409	1,356	1,512	1,173	935	874	19,616
Total Female	1,998	2,000	1,740	1,643	1,589	1,468	1,433	1,260	1,308	1,323	1,139	933	832	18,666
All Students	**4,070**	**4,121**	**3,526**	**3,391**	**3,213**	**3,069**	**2,838**	**2,669**	**2,664**	**2,835**	**2,312**	**1,868**	**1,706**	**38,282**

[1]Numbers of students shown include only instructional enrollment (excludes dormitory residents). No Alaska schools included in count as all Alaska Federal schools closed down by June 1985. The total Federal enrollment of 38,282 above differs from BIA's total Federal enrollment of 38,285 (used for BIA funding purposes). The discrepancy is due to the non-indication by a few students of their sex in the BIA count, affecting the data base used in this table which counts individual students by sex and grade.

Source: Comprehensive BIA Schools Report (FY 1987)

TABLE 8

ENROLLMENT OF INDIAN CHILDREN WITHIN BIA AREAS OF SERVICE RESPONSIBILITY, AGES 6 TO 18, EXCLUDING ALASKA SCHOOLS

Year	Federal Schools[1]	Public Schools[2]	Other Schools[3]	Not in School[4]	Total Number of Children
1930	32,316	34,775	3,358	12,802	83,251
1940	26,831	35,507	6,943	9,022	78,303
1952	31,133	48,203	8,867	N/A	N/A
1955	35,101	59,631	9,917	9,003	113,652
1960	32,179	77,262	10,388	7,989	127,818
1965	36,266	73,876	7,850	7,991	125,983
1970	40,633	113,647	10,439	11,084	175,803
1975	41,844	116,008	9,941	10,877	178,670
1977	42,523	127,952	10,724	7,678	188,877

[1]BIA-operated and contract schools. Differences between Table 3 and Table 8 reflect use of actual attendance data in Table 3, while Table 8 shows recorded enrollments.
[2]Indian children attending public school and living within areas of BIA service responsibility.
[3]Mission and other private schools.
[4]Indian children eligible for schooling who lacked access to school. Does not include children who dropped out of school.

Sources: Annual Reports of the Commissioner of Indian Affairs (FY 1930, 1940); BIA Statistics Concerning Indian Education (FY 1952-1977). Note: the BIA ceased reporting the data shown in this table after 1977.

TABLE 9

PERCENTAGES OF INDIAN CHILDREN ATTENDING FEDERAL, PUBLIC AND OTHER SCHOOLS WITHIN BIA AREAS OF RESPONSIBILITY

AGES 6 TO 18, EXCLUDING ALASKA SCHOOLS

Year	Federal Schools[1]	Public Schools[2]	Other Schools[3]	Not in School[4]
1930	38.8%	41.8%	4.0%	15.4%
1940	34.3	45.4	8.7	11.5
1955	30.9	52.5	8.7	7.9
1960	25.2	60.5	8.1	6.2
1965	28.8	58.6	6.2	6.3
1970	23.1	64.6	5.9	6.3
1977	22.5	67.7	5.7	4.1

[1]BIA-operated and contract schools.
[2]Indian children attending public school and living within areas of BIA service responsibility..
[3]Includes mission and other private schools.
[4]Indian students eligible for schooling who lacked access to schools. Does not include children who dropped out of school.

Source: See Table 8.

all across the nation is considered, the educational role of the system of BIA-funded schools is seen to be still smaller.

Data on nationwide Indian enrollment in public schools was not available until 1968. However, beginning then, the Office of Civil Rights in the Department of Health, Education and Welfare (now in the Department of Education) has published results of a nationwide survey every two years on the enrollment of minority students in public and private schools. (BIA-funded schools are not included in the survey.) As shown in Table 10, in 1968 there were a total of 177,463 Indian students in the public and private schools of the United States. In subsequent years, Indian enrollment in these schools rose steadily, climbing to 288,262 Indian students in 1976 and then to 353,462 Indian students in 1986.

Given only limited growth of enrollment in the system of BIA-funded schools, this system now plays only a small role in educating the Indian children of the United States, as many Indian families have left (and are leaving) reservations to seek employment in off-reservation communities. As seen in Table 10, the BIA-funded system contained 22.5 percent of Indian students as recently as 1968. However, by 1986, Indian enrollment in BIA-funded schools was less than 10 percent of the nationwide enrollment of Indian children.

In individual states, nevertheless, BIA-funded schools continue to play a significantly greater role in Indian education. Yet, even in these states, the BIA-funded system has become less important over the years, and public (and private) schools have taken on a larger responsibility for the provision of Indian education. For example, as shown in Table 11, BIA-funded schools in Arizona provided the education for more than 50 percent of Arizona Indian students as recently as 1968. Then, in the next ten years, Indian enrollment in public and private schools in Arizona more than doubled, while enrollment in BIA-funded schools declined by 8 percent. As a result, by 1978 the share of the BIA system in Indian education had fallen from above 50 percent to below 30 percent. For the years 1980 to 1984, data for Indian enrollment in Arizona public and private schools is distorted by revised sampling procedures. However, the 1986 survey by the Office of Civil Rights in the U.S. Department of Education returned to the procedures employed in 1978 and earlier years. In 1986, BIA-funded schools served only 28 percent of the total Indian enrollment in Arizona.

In New Mexico, the system of BIA-funded schools played a smaller role in Indian education in 1968, containing 33 percent of Indian enrollment. As shown in Table 12, in subsequent years there have been only slight changes in the roles of public and private versus BIA-funded schools in the education of New Mexico Indian students. Thus, BIA-funded schools in New Mexico contained 28 percent of Indian enrollment in both 1978 and in 1986. By 1986, Arizona and New Mexico were comparable in this regard.

The trends in state and Federal roles in Indian education also differ significantly in North Dakota compared with South Dakota. As shown in Table 13, North Dakota--

TABLE 10

TOTAL INDIAN ENROLLMENT IN U.S. ELEMENTARY AND SECONDARY EDUCATION, BY TYPE OF SCHOOL

Year	Public and Private Schools[1]	BIA-Funded Schools[2]	All Schools	Percent BIA-Funded
1968	177,463	51,448	228,911	22.48
1970	197,245	52,098	249,343	20.89
1972	232,765	53,646	286,411	18.73
1974	288,208	49,524	337,732	14.66
1976	288,262	45,609	333,871	13.66
1978	329,430	41,324	370,754	11.15
1980	305,730[3]	41,604	347,334	11.98
1982	N/A	40,773	N/A	N/A
1984	364,313[3]	40,693	405,006	10.05
1986	353,462[4]	38,475	391,937	9.82

[1]Does not include BIA-funded schools.
[2]BIA-operated and contract schools. Excludes BIA dormitory counts. Prior to 1980, based on enrollment counts taken that were defined and calculated differently from determining average daily attendance (ADA).
[3]Government sampling procedures employed in 1980, 1982, and 1984 were modified from earlier years and were not designed to yield a representative sample of Indian students. As a result, no projections of Indian students could be made in 1982, and the 1980 and 1984 projections contain abnormally large standard errors.
[4]Preliminary.

Sources: U.S. Department of Education, Office of Civil Rights Survey 1968-1986 (Public and Private School data); BIA FY 1968-78 Statistics Concerning Indian Education (BIA-Funded Schools data); BIA School Reports 1980-86 (BIA-Funded Schools data).

TABLE 11

TOTAL INDIAN ENROLLMENT IN ARIZONA ELEMENTARY AND SECONDARY EDUCATION, BY TYPE OF SCHOOL

Year	Public and Private Schools[1]	BIA-Funded Schools[2]	All Schools	Percent BIA-Funded
1968	14,431	14,874	29,305	50.76
1970	19,541	15,691	35,232	44.54
1972	24,743	15,857	40,600	39.06
1974	26,711	15,448	42,159	36.64
1976	30,803	13,241	44,044	30.06
1978	33,556	13,751	47,307	29.07
1980	19,952[3]	12,716	32,668	38.92
1982	N/A	13,360	N/A	N/A
1984	58,270[3]	14,599	72,869	20.03
1986	35,471[4]	13,637	49,108	27.77

[1]Does not include BIA-funded schools.
[2]BIA-operated and contract schools. Excludes BIA dormitory counts. Prior to 1980, based on enrollment counts taken that were defined and calculated differently from determining average daily attendance (ADA).
[3]Government sampling procedures employed in 1980, 1982, and 1984 were modified from earlier years and were not designed to yield a representative sample of Indian students. As a result, no projections of Indian students could be made in 1982, and the 1980 and 1984 projections contain abnormally large standard errors.
[4]Preliminary.

Source: See Table 10.

TABLE 12

TOTAL INDIAN ENROLLMENT IN NEW MEXICO ELEMENTARY AND SECONDARY EDUCATION, BY TYPE OF SCHOOL

Year	Public and Private Schools[1]	BIA-Funded Schools[2]	All Schools	Percent BIA-Funded
1968	19,742	9,720	29,462	32.99
1970	19,216	9,286	28,502	32.58
1972	22,134	10,803	32,937	32.80
1974	23,600	10,477	34,077	30.75
1976	22,801	8,780	31,581	27.80
1978	22,436	8,841	31,277	28.27
1980	20,969[3]	8,458	29,427	28.74
1982	N/A	9,381	N/A	N/A
1984	24,057[3]	9,791	33,848	28.93
1986	24,815[4]	9,594	34,409	27.88

[1]Does not include BIA-funded schools.
[2]BIA-operated and contract schools. Excludes BIA dormitory counts. Prior to 1980, enrollment counts were defined and calculated differently from average daily attendance (ADA).
[3]Government sampling procedures employed in 1980, 1982, and 1984 were modified from earlier years and were not designed to yield a representative sample of Indian students. As a result, no projections of Indian students could be made in 1982, and the 1980 and 1984 projections contain abnormally large standard errors.
[4]Preliminary.

Sources: U.S. Department of Education, Office of Civil Rights Survey 1968-1986 (Public and Private School data); BIA FY 1968-78 Statistics Concerning Indian Education (BIA-Funded Schools data); BIA School Reports 1980-86 (BIA-Funded Schools data).

TABLE 13

TOTAL INDIAN ENROLLMENT IN NO. DAKOTA ELEMENTARY AND SECONDARY EDUCATION, BY TYPE OF SCHOOL

Year	Public and Private Schools[1]	BIA-Funded Schools[2]	All Schools	Percent BIA-Funded
1968	1,523	3,049	4,572	66.69
1970	1,133	3,218	4,351	73.96
1972	4,017	3,768	7,785	48.40
1974	4,493	3,221	7,714	41.76
1976	6,128	3,719	9,847	37.77
1978	5,055	3,314	8,369	39.60
1980	1,662[3]	3,512	5,174	67.88
1982	N/A	3,297	N/A	N/A
1984	7,089[3]	3,315	10,404	31.86
1986	5,934[4]	3,223	9,157	35.20

[1]Does not include BIA-funded schools.
[2]BIA-operated and contract schools. Excludes BIA dormitory counts. Prior to 1980, enrollment counts were defined and calculated differently from average daily attendance (ADA).
[3]Government sampling procedures employed in 1980, 1982, and 1984 were modified from earlier years and were not designed to yield a representative sample of Indian students. As a result, no projections of Indian students could be made in 1982, and the 1980 and 1984 projections contain abnormally large standard errors.
[4]Preliminary.

Sources: U.S. Department of Education, Office of Civil Rights Survey 1968-1986 (Public and Private School data); BIA FY 1968-78 Statistics Concerning Indian Education (BIA-Funded Schools data); BIA School Reports 1980-86 (BIA-Funded Schools data).

like Arizona--has seen sharp declines over the past two decades in the role of BIA-funded schools in Indian education, the share of these schools declining from 67 percent in 1968 to 35 percent in 1986. In South Dakota, as shown in Table 14, the estimates of public and private Indian enrollment made by the Office of Civil Rights show no consistent up or down pattern. The year-to-year shifts in the estimates may reflect changes in sampling procedures and random variations that result in large standard errors for small population estimates. The overall trend, however, suggests that public and private schools in South Dakota over the years have contained around 60 percent to 70 percent of Indian enrollment, leaving 30 to 40 percent of student enrollment in BIA-funded schools.

TABLE 14

TOTAL INDIAN ENROLLMENT IN SO. DAKOTA ELEMENTARY AND SECONDARY EDUCATION, BY TYPE OF SCHOOL

Year	Public and Private Schools[1]	BIA-Funded Schools[2]	All Schools	Percent BIA-Funded
1968	16,533	5,046	21,579	23.38
1970	7,536	5,700	13,236	43.06
1972	9,009	6,143	15,152	40.54
1974	11,899	5,758	17,657	32.61
1976	9,121	5,455	14,576	37.42
1978	8,501	4,343	12,844	33.81
1980	8,430[3]	5,488	13,918	39.43
1982	N/A	5,152	N/A	N/A
1984	7,545[3]	5,307	12,852	41.29
1986	10,021[4]	5,397	15,418	35.00

[1]Does not include BIA-funded schools.
[2]BIA-operated and contract schools. Excludes BIA dormitory counts. Prior to 1980, based on enrollment counts that were defined and calculated differently from average daily attendance (ADA).
[3]Government sampling procedures employed in 1980, 1982, and 1984 were modified from earlier years and were not designed to yield a representative sample of Indian students. As a result, no projections of Indian students could be made in 1982, and the 1980 and 1984 projections contain abnormally large standard errors.
[4]Preliminary.

Sources: U.S. Department of Education, Office of Civil Rights Survey 1968-1986 (Public andPrivate School data); BIA FY 1968-78 Statistics Concerning Indian Education (BIA-Funded Schools data); BIA School Reports 1980-86 (BIA-Funded-Schools data).

Future Enrollments of Reservation Children

In examining the future of the system of BIA-funded schools, it is important to examine not only past enrollments but also to assess likely future enrollments. Hence, projections were developed of future Indian populations of school age on reservations and of possible future levels of attendance of these reservation children in BIA-funded schools. It should be noted that BIA-funded schools draw a number of students who actually live off-reservation, but near enough to participate in the tribal community. Indians living near but not on reservations are generally eligible for BIA services, including BIA schools.

Given the imprecise definition of "near-reservation" populations, it would have been much more difficult to develop projections for these populations as well. The projections given below of future reservation populations of school age thus do not encompass the full population base from which BIA schools will draw in the future. However, the rates of population increase found on reservations are very likely a good indication of the rates of increase of the overall population base for BIA schools.

The U.S. Census Bureau in 1980 calculated for each Indian reservation the number of Indian children of school age (ages 5 to 17), and then further disaggregated these reservation totals by the counties that made up each reservation. By applying projected rates of overall growth of Indian populations in each county to the 1980 Census tabulations by county, projections could then be derived of Indian school age children by county and for total reservation populations of children in 1990, 1995 and 2000. The county projections were obtained from the Indian Health Service (IHS), which has developed projections from the present to the year 2000 of Indian populations by county and by state for all those states that contain Indian reservations.

As shown in Table 15, based on these census counts and IHS projections, the total number of Indian children of school age and living on reservations is projected to increase from 80,524 children in 1985 to 102,133 children in the year 2000 for the four states of Arizona, New Mexico, North Dakota and South Dakota combined. This projected growth rate of 27 percent over 15 years for reservation school-age children is consistent with the very high Indian birth rate, exceeding the birth rate of almost every other population group in the U.S. In Arizona, school-age children on reservations are projected to increase from 42,871 in 1985 to 54,090 in 2000, a growth rate of 26.2 percent. The Navajo school age population is projected to grow by 25.5 percent over this period, while reservation populations of other Indians in Arizona of school age are projected to grow by 27.4 percent.

In New Mexico, the projected growth of Indian children of school age on reservations is from 22,549 in 1985 to 29,058 in the year 2000, a growth rate of 28.9 percent. The growth rates of Indian school age populations for North Dakota and South Dakota are of similar general magnitudes--27.3 percent and 25.0 percent, respectively, for the years from 1985 to 2000.

Given a reasonably accurate projection of future Indian reservation populations of school age, it is still uncertain how many of these children will attend BIA or contract schools. For one thing, the number of reservation children who will drop out and no longer attend school is unknown. Perhaps even more important, the number of reservation children who will attend public schools, rather than BIA-funded schools, is unknown.

TABLE 15

PROJECTED TOTAL NUMBERS OF INDIAN CHILDREN LIVING ON INDIAN RESERVATIONS, AGES 5-17, BY REGION

REGION	ACTUAL 1980	ESTIMATED 1985	PROJECTED 1990	PROJECTED 1995	PROJECTED 2000
Navajo Arizona[1]	24,763	28,027	30,816	33,182	35,183
Other Arizona	13,282	14,844	16,352	17,717	18,907
Total Arizona	38,045	42,871	47,168	50,899	54,090
Pueblo New Mexico	8,217	9,167	10,069	10,801	11,479
Navajo New Mexico	9,498	10,712	11,789	12,723	13,522
Other New Mexico	2,393	2,670	2,934	3,159	4,057
Total New Mexico	20,108	22,549	24,792	26,262	29,058
South Dakota	9,607	10,709	11,715	12,611	13,390
North Dakota	3,866	4,395	4,862	5,261	5,595
4 State Total	71,626	80,524	88,537	95,033	102,133
All Reservations	110,970	122,976	134,599	145,395	155,052

[1]Navajo Arizona counts include a limited number of Utah and Navajo children as well.

Sources: 1980 Census of Population (American Indians, Eskimos, and Aleuts, on Identified Reservations and the Historic Areas of Oklahoma Excluding Urbanized Areas); and unpublished projections made by the Indian Health Service by state and county of total Indian population in 1990, 1995 and 2000. Numbers of Indian children ages 5-17 in each county on each reservation, as shown by the U.S. Census for 1980, were adjusted to 1985, 1990, 1995 and 2000 in proportion to total rates of Indian population growth projected for that county, using the growth projections made by IHS. County projections were then summed for appropriate groupings of counties.

Table 16 is therefore based on the highly simplifying assumption that reservation children in the future will attend BIA and tribal schools in the same percentages that they attended BIA and tribal schools in 1980. Using this simplifying (and in fact unrealistic) assumption, in the four states of Arizona, New Mexico, North Dakota and South Dakota, there are projected to be 54,554 Indian students in BIA and tribal schools in 1990, an increase from 1980 of 23.6 percent. Enrollment in BIA and tribal schools is projected to be 62,570 in the year 2000, an increase from 1980 of 42 percent.

As indicated above, these enrollment projections are based on U.S. Census data on student populations in 1980, adjusted by IHS projected rates of growth to 2000 of Indian populations. However, different sources of data offer different findings with respect to student counts. Thus, the Census reported that in 1980 there were 44,150 Indian students enrolled in BIA and tribal schools in four states, whereas the BIA reported for these same states and schools a total attendance in 1987 of only 31,794. Part of the problem may lie in the ambiguity of "attendance" and "enrollment." The various concepts of enrollment may include: (1) the number of students in school in any given count week (or other specified period) (2) this number, plus those with legitimate reasons for being absent from school; (3) the number of formally

TABLE 16

PROJECTED TOTAL NUMBERS OF INDIAN CHILDREN IN BIA OR TRIBAL SCHOOLS, AGES 5-17, BY REGION

REGION	ACTUAL 1980	PROJECTED 1990	PROJECTED 1995	PROJECTED 2000
Navajo Arizona[1]	16,162	20,110	21,658	22,969
Other Arizona	7,517	9,337	10,034	10,784
Total Arizona	23,679	29,447	31,692	33,753
Pueblo New Mexico	4,905	5,999	6,412	6,825
Navajo New Mexico	2,943	3,656	3,948	4,198
Other New Mexico	1,136	1,384	1,483	1,625
Total New Mexico	8,984	11,039	11,843	12,648
South Dakota	8,203	9,938	10,677	11,321
North Dakota	3,284	4,130	4,455	4,848
4 State Total	44,150	54,554	58,667	62,570
All Reservations	54,922	66,617	71,960	76,739

[1]Navajo Arizona counts include a limited number of Utah, Navajo children as well.

Sources: 1980 Census of Population (American Indians, Eskimos, and Aleuts, on Identified Reservations and the Historic Areas of Oklahoma Excluding Urbanized Areas); and unpublished projections made by the Indian Health Service by state and county of total Indian population in 1990, 1995 and 2000. Numbers of Indian children ages 5-17 in each county in BIA or tribal schools, as shown by the U.S. Census for 1980, were adjusted to 1985, 1990, 1995 and 2000 in proportion to total rates of Indian population growth projected for that county, using the growth projections made by IHS. County projections were then summed for appropriate groupings of counties.

registered students, whether present or not, in any given week; or (4) the total number of students who have attended the school at any time over the course of the year.

Moreover, BIA student counts are based on submissions from schools themselves, whereas Census student counts are derived from questions addressed to the parents. Data problems are further compounded on Indian reservations, where families are often hard to reach and inexperienced in filling out questionnaires. All in all, it should not be surprising that enrollment estimates from different sources may differ considerably. Yet, in some individual cases the differences are so large as to suggest that future investigation is needed. For example, the Census reported in 1980 that 23,679 students were attending BIA and tribal schools in Arizona, whereas seven years later the BIA reported only 13,390 students in BIA and tribal schools in Arizona.

Despite rapid growth in total Indian populations and populations of school age children in recent years, enrollment in BIA-funded schools actually has been fairly stable for many years. Indeed, if anything, the trend has been slightly downward over the past decade. Hence, projections of future BIA and contract school populations are perhaps better based on the recent trends in actual student counts in these BIA and contract schools, rather than on projections of future numbers of Indian children. If this method is used, the future of BIA and contract schools may not hold rapid rates

of student increases, as Table 16 might seem to suggest. Rather, enrollments in the system of BIA-funded schools are perhaps most likely to stay about where they have been for the past decade. Future enrollments in BIA and contract schools may well depend on educational policy decisions, much more than on projected rates of student population increase of the sort shown in Table 15.

Conclusion

In the past century the BIA system of education has evolved through three main stages. In the late 19th century the BIA was the primary provider of education for Indians--helped out by mission and other private schools. Early in this century, the second stage began. Public schools began to be important contributors to Indian education. The BIA remained a full and equal partner with public schools--both systems serving a similar number of Indian students in 1930, for example, in BIA service areas.

In the third stage since World War II, BIA-funded schools have taken a less prominent role nationally in educating Indian students. By 1986, BIA-funded schools enrolled fewer than 10 percent of the total U.S. population of Indian students. Schools directly run by the BIA enrolled about 7 percent of Indian students, and 3 percent of Indian students were enrolled in contract schools managed by Indian groups themselves. The BIA system became, in effect, a system specializing in and containing high percentages of children with unusual circumstances and particular needs. Many of the children were "at risk" and came from the more isolated reservations. These students had language and other special requirements; and, for some, education found in BIA-funded schools was their only option. These circumstances were found most often on the Navajo Reservation, which enrolled almost 50 percent of all students attending BIA-funded schools. BIA-funded Indian education became, to a significant extent, Navajo education, matched by the education of about an equal number of Indians from all other tribes combined. For 90 percent of all Indians in the United States, however, Indian education today is public school education.

CHAPTER III

Descriptions of the Schools Themselves

As part of the planning effort for this report, the Office of Indian Education Programs (OIEP) asked the principals of selected schools--both BIA-operated and contract--to describe their school. Each principal was asked to summarize briefly the working environment of the school, the background of the students, school successes, school problems, interactions with tribes and parents, and other matters of interest. The selection of schools was not based on a methodology that would seek to ensure a sample representative of all schools. Indeed, the selection process was probably biased towards schools with articulate and enthusiastic principals who might have some educational successes and other good things to say. Moreover, while many principals responded, others did not; in the end, 28 replies of widely varying detail and completeness were received. Here again, there was probably some bias introduced in favor of principals with successes to relate.

Although a limited and not fully representative sample, the responses nevertheless give a good sense of the circumstances of both BIA-operated and contract schools. One of the important messages is in fact the diversity of the BIA-funded system. What is true of one school is often not true of another--even limited to the 28 schools that responded. While it is possible to generalize about Indian education, it must also be kept in mind that there are likely to be important exceptions.

With these cautionary notes, some of the significant themes that emerged in the comments of the school principals are presented below, including selections in the words of the principals themselves, excerpted from their written remarks.

Physical and Cultural Isolation

As examined in Chapter II, Indian education in America has largely become a system of public school education. The Federal government is likely to have direct responsibility for Indian education only in special circumstances. The BIA system has thus become in many ways a backup system, filling in and meeting Indian educational needs when other schools were less able or willing to do so. Perhaps the most frequent factor explaining the presence of a BIA-funded school is the physical isolation of Indian communities and children. Many BIA schools have been built and maintained in remote areas where other schools were not available.

The physical isolation of BIA schools reaches an extreme in the case of the Havasupai Elementary School. Partly because of the isolation of the Havasupai Tribe, no member of this tribe has yet graduated from college. The principal writes of the school's setting:

> Our Havasupai Tribe consists of 545 people living on our 196,000 acre reservation abutting Grand Canyon National Park. We live in Supai Village, at the bottom of Havasu Canyon. We are the most geographically and culturally isolated Tribe in the continental United States. The nearest road, accessible only by foot or horse, is eight miles away and over a half mile up. The nearest town of 1000 is 80 miles away. The nearest cities are Kingman (2 hours west) and Flagstaff (3 hours east).
>
> Communications with the "outside world" are sporadic at best. About a dozen families, the school and tribal government offices have phones. But the phones don't work a lot of the time. No broadcast T.V. is available, Radio bounces in (and out) only at night. Mail service is now five days per week, through which we obtain food and other supplies.

The wide geographic dispersion of students, severe climate and physical isolation of Navajo communities have had a major impact on the system of education developed on the Navajo Reservation. Attendance in day schools has been infeasible for many Navajo students, because they were too far from school and/or roads were inadequate for daily bus travel. In addition, many Navajo believe that Navajo children will receive better food and in general be better served by the environment of a boarding school, as compared with poverty-stricken and socially distressed home environments. Combined with the additional employment for Navajo generated by dormitories, the Navajo have often strongly favored boarding schools. The principal of the Dzilth-na-o-dith-hle boarding school thus writes:

> Community, for the Navajos living here, refers to remote land areas where the people live in extended family groups in relative isolation. Thus, the schools and Chapter Houses (the political and social precincts of the Navajo Tribe) become the foci of community life. The Dzilth-na-o-dith-hle enrollment boundary encompasses over 700 square miles serving three chapters: Huerfano, Counselors, and Nageezi with a total population of over 6,000 Navajos.
>
> The school's academic program goes from kindergarten through 8th grade. However, due to isolation factors, the school has expanded it's dormitory program to include secondary students who are bussed daily to Bloomfield Public High School. Otherwise, these 67 students would face bus rides exceeding 60 miles one way, most over ungraded and unimproved dirt roads which in inclement weather often become impassable. The winters can be harsh.

> The school population is 100% Navajo (American Indian). Of the 147 students enrolled in grades 5-8, 130 students (88%) qualify for free meals based on the U.S. Department of Agriculture's income eligibility criteria. Over 50% of the students entering school are native language speakers. Of the 147, two-thirds reside in dormitories located on the school campus. Students are bussed home by the school on Friday afternoons, picked up on Sunday afternoons and returned to the school.

The principal of another BIA school on the Navajo Reservation, the Navajo Mountain boarding school, also describes an environment of perhaps even greater physical and cultural isolation.

> The history of the area and school is tied closely to the remoteness, ruggedness and beauty of the land. Within a twenty mile radius of the school elevations range from 10,388 feet, at the top of Navajo Mountain, which is the highest point on the Navajo Reservation, to 3,700 feet, which is the elevation at the bottom of the deep colorful canyons. This creates different climatic conditions and vegetation patterns. The remoteness has limited development, limited resources and slowed contacts with outside communities.
>
> During the "Long Walk" period many of the Navajo Mountain people did not go to Fort Sumner. They hid in the mountains, canyons and other rough areas that appeared inaccessible to those unfamiliar with the area. In 1935 the first school was built by the Bureau of Indian Affairs. It went to the second grade and later the third grade was added. Until 1984 students wanting to continue their education beyond the third grade had to leave the community to attend boarding schools. In 1984 new modern school facilities were opened, serving students up to the sixth grade. The school enrollment during the 1986-1987 school year was 146. Approximately one-third of the students attend as day students. The remainder are residential students due to the remoteness of their homes or the conditions of the roads. The community and school board have requested that the school be expanded to the eighth grade so more students can remain in the community and live closer to home while getting their education. No public or private schools are located within the schools attendance area and no students are bussed from the area. The student population is stable. Changes in enrollment occur when families move from the area to attend school or to seek employment and then return.
>
> Over ninety percent of the families fall below the poverty line. Most families derive income and support from the land or from traditional arts and crafts. This consists mainly of raising livestock, picking pinon nuts, and weaving baskets. Most households are subsidized through some form of public assistance. These programs include general assistance, food stamps, commodity food distributions and housing assistance. The only

> employment, besides the school and that provided through the community and tribal governments, are at the trading post and clinic. These two organizations provide five jobs.

It is not only in the Southwest that Indian students must be gathered over wide areas. The principal of the Ojibway School in northeastern Minnesota reports that "the students are from the five surrounding school districts of Cloquet, Carlton, Duluth, Albrook, and McGregor. This area is over a three county area. Our five buses travel in excess of 850 miles per day." In South Dakota, the principal of the Fort Thompson Elementary School writes of the cultural isolation of the members of the Crow Creek Sioux Tribe: "Since the reservation is isolated the mixture of the different cultures is of a limited basis. The people of the Crow Creek Reservation do not on a regular basis associate or marry non-Indian persons."

Illustrating the diversity of circumstances in Indian education, while the majority of BIA schools are in isolated locations, the Salt River Day School is located right on the edge of Phoenix. Its principal writes that:

> The Salt River Day School was built in 1935, with a number of Indian high school boys helping with the construction. The architecture is Spanish with white-washed adobe brick, re-tiled roofs, and a lovely grassed patio which is very fitting to life on the Southwest's Sonoran Desert.
>
> The Salt River Indian Community is located in Maricopa County, Arizona, at the eastern edge of the Phoenix Metropolitan Area. It is bounded by the cities of Scottsdale, Tempe, and Mesa on the west and south; by open land for the most part in the public domain to the east, and by the Fountain Hills Development and the McCormick Ranch on the north.

School Facilities

School facilities vary widely among the BIA-operated and contract schools that make up the BIA-funded system of Indian education. Some BIA schools are housed in modern buildings with contemporary architecture, containing all the equipment and room space that modern education may demand. Other schools are the one-room school house, often built long ago and today suffering physical deterioration. Three schools of the latter type are found on the Cheyenne River Sioux Reservation in South Dakota:

> The three East End Schools are Promise, Swift Bird, and White Horse Day Schools. The distance between White Horse and Promise schools is 20 miles and between Promise and Swift Bird schools is 30 miles whereas White Horse and Swift Bird schools are 40 miles apart on black-top road.

> White Horse and Promise are also connected by a black-top road. However, the road between Promise and Swift Bird is gravel.
>
> The landscape of the reservation is quite picturesque and beautiful. It is a part of American Prairies and is utilized for ranching. It is also the area where the monument of chief Sitting Bull is located. There is good hunting and fishing on the reservation but about 80 percent families have to survive with below povertyline income. Unemployment stays at 75 percent or more most of the time. There is no industry on or around the reservation. Job situation is very serious and grim most of the time.
>
> Promise Day School is housed in a building which could be classified as a one-teacher-one-room school with a small apartment for the teacher in the same building. Recently the apartment for the teacher in the building has been converted to a small classroom which is being used for Chapter I program. It also has another small room used as the office and one other room which is used for Special Education. A single width trailer is also located close to the main building and it is used as a classroom for upper grades (5th to 8th). The room in the main building serves as a classroom for grades K-4th. The basement of the building serves as kitchen and lunchroom. The school also has a house for a teacher's residence on the premises and a bus garage which is also used for storing anything spare in the school. Some playground equipment has been there for several years and a few new pieces have also been installed recently. There is no provision for games, sports and athletics because of no facilities, equipment or personnel for it.

Adjoining the Cheyenne River Sioux Reservation is the Standing Rock Reservation, straddling the boundary between South Dakota and North Dakota. It is the home of the Standing Rock Sioux Tribe and of Standing Rock High School, located in Fort Yates in North Dakota. Unlike the day schools of the Cheyenne River Reservation, this high school is a fairly new and modern facility, reflecting the latest thoughts in education design. The principal writes that:

> The school facility was occupied for the first time in the fall of 1979. The school is a poured concrete building and was designed on the open space concept. The building is a sprawling, basically one story structure and one of the finest facilities in the area. It includes: modern shop areas for woodworking, drafting, auto mechanics and home economics. A large gymnasium supports the physical education programs and community supported athletic activities. The academic classrooms, though basically open, have been partitioned by portable walls to create a semblance of self-containment and classroom organization.

In Oregon, the Chemawa school is an off-reservation boarding school, which was founded more than 100 years ago as part of the movement to draw Indian students

away from the damaging influence--as it was then seen--of traditional Indian culture. The Chemawa School today still draws its Indian high school students from Idaho, Montana, Oregon, Washington, Wyoming and several other states. A new and modern school facility was completed in 1980, as described by the principal:

> Completed in 1980 and set in a beautifully landscaped area, Chemawa School has an impressive two-story brick instruction complex housing open concept classroom spaces designed to accommodate 600 students, large indoor pool, beautifully appointed gymnasium and recreation center, large dining area, an auditorium with a seating capacity of 750, library with 8,500+ books, football stadium, softball and baseball fields, tennis courts, outdoor amphitheater and large covered play area. An on-going art program of student murals have beautifully decorated the hallways, library and dining area. Covered walkways lead to 10 hillside 3 and 4-level dormitories with a capacity for 400 students--two students per room with a bathroom between each set of two rooms. A staff office, kitchenette, laundry room and living room area completes each unit. These college-type dormitories provide a maximum of privacy but the design presents supervision and staffing challenges for an adolescent population.

While a number of schools have excellent facilities, others report overcrowding, use of temporary structures and dilapidated conditions. There is currently a long backlog of school requests for repairs and renovation of school facilities, and in some cases the further expansion of capacity. The principal of the Fort Thompson Elementary School writes:

> The Fort Thompson School system is a K-6 educational institution serving 170 students in grades K-6. The educational facility is a one story structure built in the 1960's. The structure has been renovated and has had additional classroom space added since the initial construction. There are four modular buildings outside the main structure which house kindergarten, Chapter 1, and Fifth and Sixth grade classrooms. Since the renovation the patch work that was done has started to reopen causing the cracks to reappear making it necessary to request additional renovation to be submitted. Also with the rise in enrollment for the next several years we anticipate our enrollment to climb to at least 240 students, making the facility inadequate to fill the needs of the students. We are also requesting an addition be added to the present facility to fill this need. With the renovation project of 1984 that project extended the useful life of this facility to the early 1990's. This would mean that the total facility complex would then be obsolete within two years.

Curriculum

The curriculum of BIA schools depends on the size of the school and the availability of physical facilities. Schools with fewer students and smaller facilities can offer mainly basic courses in reading, writing, mathematics, spelling and other educational requirements. However, most BIA schools have a wider range of offerings. The principal of the Ojibway School (grades 7 to 12) in Minnesota writes that:

> The curriculum of the Ojibway School includes Reading and Language Usage, School Newspaper and Composition, General Math, Algebra, Geometry, Earth Science, Life Science, Physical Science, Biology, Chemistry, Environmental Science, Ojibway Language, History, Geography, Civics, Sociology, Tribal Government, Fond du Lac History, Minnesota Chippewa Tribe History, Drawing, Painting, Ceramics, Beading, Jewelry, Photography, Clay Molding, Wood Carving, Physical Education, Health, Human Anatomy, Sexuality, Drug and Alcohol Abuse, Nutrition, Computer Studies, and Computer Literacy.

Even in elementary school, many BIA schools offer a wide range of programs and materials for their students. Some of these schools can match the curriculum of the best schools in well-off suburban school districts in metropolitan areas. The principal of the Salt River Day School (grades K-6) writes that:

> Curriculum Offerings: The curriculum at the Salt River Day School is designed to emphasize subject areas of reading, language arts, math, science, social studies, health and physical education. Classes are small, with an average of 15-20 students per classroom teacher. It is the responsibility of the school to provide an instructional program to meet the special needs of all students, in particular, the special needs of children in kindergarten and first grades.
>
> The major function of the school curriculum is to facilitate individualized, prescriptive teaching/learning experiences and to provide instructional support in grades K-6.
>
> Consistent with the school philosophy to develop an instructional program that meets the special needs of all students in the school, Individual Education Plans (IEP's) are developed and maintained in reading, language, and mathematics for all students. The foundation of diagnostic-prescriptive protocol for each IEP is the Brigance Inventory of Basic Skills. This criterion-referenced tool provides guidance in the systematic development of instructional objectives and in the programming of appropriate instructional strategies.

> The school's academic program promotes the concept of the inter-disciplinary treatment team approach between the Regular Program and Chapter 1 staff, with the support and assistance of the special education teachers, school counselor, special education coordinator, speech/language pathologist, and the consulting school psychologist.

Even in the isolated environment of the Standing Rock Sioux Reservation, some BIA students are exposed to a full range of the latest developments in American education. The Little Eagle Day School in South Dakota has students from families that are mostly Hunkpapa Sioux. The principal writes that "at least eighty-five percent of 105 students enrolled speak or understand the Lakota Siouan language and utilized Lakota English or have limited English proficiency. Most community activities and religious ceremonies are held in Lakota. The average educational level of fifty-three parent sets is eighth grade." While the parents did not have the opportunity, the current students of Little Eagle Day School will be exposed to a rich and diverse curriculum that will include the worlds of modern media, computers and technology:

> The educational goals number fifteen, all directed to producing self-sufficient citizens and retain cultural values so a positive self-concept may be developed.
>
> Elementary education services provided are in accordance with federal and state requirements. Additional support services are provided as required or petitioned through special education, Chapter 1 and Title VII, Bilingual/Bicultural instruction. The support services are provided for students needing remedial instruction, handicapped and to increase English proficiency.
>
> A written congruent curriculum containing level instructional goals and objectives is used for each subject required in basic skills, content and special areas as music, physical education, and art. Library science and computer literacy is taught to all grades. The classrooms are self-contained with combined grades in second/third, fourth/fifth, and sixth/seventh, eighth grades. The arrangement of combined grades is definitely an overload for a teacher, though alternate subject plans are devised. Opportunities are provided for students to be exposed to career interests. The instructional program reflects the special needs of students and yet is flexible enough to permit modifications as deemed necessary. All students are properly placed by grade enrollment information, transcripts or placement tests according to the levels of difficulty with emphasis on basic skills.
>
> Corrective Writing and Sustained Writing classes have been implemented to improve writing skills under the auspices of Title VII.

> In addition to the basic texts, a variety of supplementary materials and supplies are used for each subject area. A variety of filmstrips, records, tapes, films, library books, newspapers, weekly readers, magazines, reference materials, photographs, maps, charts, graphs and other illustrative materials are used to assist in the understanding of the text. All materials are carefully controlled based on reading levels. Resources are sought from many sources, state film library, universities or colleges, free sources, federal and the community, as needed. All media is centrally located and inventoried. New additions include four (4) computers and a variety of software.
>
> Counseling services are provided through the Agency plan.
>
> Extra-curricular activities include volley ball, basketball, dancing, Indian club, track, field trips, honor trips, and fund raising.

One of the chief obstacles faced by many Indian students is that they do not speak English when they arrive in school. Indian students thus tend to lag behind other student populations most of all in the language arts areas. In the 1930s, the BIA introduced bilingual education, but language has remained a major problem. In recent years, therefore, some BIA schools have introduced new methods and refocused their attention on the methods to instruct Indian children effectively. The Chuska and Dilcon boarding schools on the Navajo Reservation in Arizona have been two BIA schools that have met the challenge head-on by introducing the "whole language" method. Whole language is an instructional approach that realizes the importance of capitalizing on the sociocultural background and the individual set of experiences that an Indian or any student brings to the classroom. Instructionally, whole language maximizes the learning experience of each student-participant by building upon the student's knowledge gained outside the classroom. Chuska's principal explains:

> There are seven basic components to the Whole Language program:
>
> - **Reading to the Students.** Students need to see adults model "Reading" behaviors. Stories are read in both the classroom and dormitory. Stories and poems are shared and the students develop a sense of belonging. The dorm aides and/or teachers encourage the students to predict what will happen next in a story or guess how a character might solve a problem. Students can be introduced to more sophisticated writing and vocabulary than what they can read.
> - **Students Read to Themselves Daily.** Students are allowed to select books of their choice. So that there is an adequate variety of materials, a large selection of hardback and paperback books have been purchased for both the classroom and dormitory reading centers. The staff encourages the students to select a wide variety of reading material.

- **Students Write Everyday.** From the very first day of school all students are encouraged to write. Kindergarten and first graders new to our school are also encouraged to write even though they may be the only ones who can read their writing. Usually children who are hesitant about their ability to write will begin their writing with scribbles, pictures, letters, copying and spelling inventions. Each student keeps a journal and teachers must write back to the student at least three times per week. (This journal is so crucial that it is a part of all regular and special education teachers' performance standards). These student writers quickly see the relationship between writing and reading. There is meaning in all their writing and hence they expect to encounter meaning when they read the writing of others.

- **Students Bring Familiar Language to the Classroom.** Students dictate rhymes, songs, and commercials to the teacher who puts the information on the board. The dormitory staff teach fun songs and finger plays to the students. This has the effect of adding to the students' English language base.

- **Language Experience Activities.** Students talk about their experiences and then write them with the help of the teacher and/or aide or independently. The teacher and/or aide talks the children through the story and helps them clarify their thoughts. Students then read their stories to others. Because the children are writing about themselves and things familiar to them the cultural values of the Navajo people are given respect and creditability. Whole Language methods and techniques work equally well in Navajo or English. The child learns at an early age to respect their traditional values and their native language.

- **Extended Literature Activities.** The students and teacher share poems, stories and books. Ideas gleaned in these discussions are expanded upon to provide more material for reading and writing.

- **Reading Strategy Instructions.** Students learn to sample from print and to make predictions and then to read to confirm these predictions.

Using these seven whole language components has accelerated the learning process for students attending Dilcon and Chuska schools in the Fort Defiance Agency. Since many of the Indian students are bilingual who attend these two schools, improvement in English reading, speaking and writing skills cannot be observed overnight. But unlike their non-whole language counterparts, who tend to loose learning momentum in the classroom after the third grade, whole language students are observed to increasingly master basic skill areas over time. By the eighth grade or the last year in elementary school, Dilcon and Chuska students are near or above national norms, as measured by the CTBS battery of tests:

National Eighth-grade Norm (spring)	= 8.7
BIA Norm (spring 1987)	= 6.7
Chuska (spring 1987)	= 7.7
Dilcon (spring 1987)	= 8.9

A number of other schools on the Navajo Reservation also use the whole language program. The principal of the Greasewood-Toyei Consolidated School in Arizona writes that:

> Greasewood-Toyei Consolidated School is comprised of 95% Navajo students who primarily speak their native tongue. English as a second language has been emphasized over the years particularly in the lower grades. With the implementation of the whole language approach new techniques are used to enhance language development. It is the belief of the staff of Greasewood-Toyei School that once a child can comprehend the English language he will progress in reading and other areas.
>
> Class schedules have already been made whereby the expertise of the sixth-grade teachers will be utilized in teaching the main concepts of the Whole Language program (Literature studies, creative writing, journals, etc.) Elective classes in Home Economics, Industrial Arts, Science, and Typing will be scheduled for upper grade students. Music, Art, Computers, and Library will include all grades. In the Fort Defiance Agency all schools are mandated to implement the Whole Language Approach to teaching in all grades K-8th. At Greasewood-Toyei School, all teachers are required to have training in Whole Language. If/when new teachers are hired they are scheduled to participate in the Agency-wide summer institute. Throughout the year consultants visit the school to provide technical assistance for those who may have problems. In-service is conducted throughout the school year as a means of keeping staff motivated and up to date on new techniques and ideas. With the implementation of the Whole Language approach, there has been academic growth among students in all grades. The follow-up visits to the consultants as well as wing meetings eased the tension of those staff members who felt initially uncomfortable about utilizing the concepts of the whole language approach. Throughout the school year students participated in writing contests held at other schools. Awards received were a result of teachers and aides spending many hours planning, organizing, and implementing techniques developed to enhance student progress in writing skills. Students in grades K-8th published books and shared with their classmates as well as other classrooms and the library. Older students read their books to younger children. The following illustrates the amount of student gain from the fall of 1986 to the spring of 1987 in language.

2nd grade.....1.6.....3.1

3rd grade..... 2.3.....3.1

4th grade .....3.3.....4.2

5th grade.....4.2.....4.6

6th grade.....5.6.....7.9

7th grade.....5.0.....5.9

8th grade.....7.0.....8.2

Although BIA education long ago sought to eliminate the influence of tribal culture on Indian students, this policy was reversed in the 1930s. In recent years, a number of schools have made greater efforts to teach Indian history, government and other elements of Indian culture. The goals set for students by the Dzilth-na-o-dith-hle School on the Navajo Reservation include the following for seventh and eighth graders:

Seventh graders are expected to:

- Compare and contrast given time-lines of New Mexico history with United States history.
- Outline Navajo history up to 1868.
- Compare and contrast the treatment of an Indian tribe in the United States, Canada and a Latin American country by their respective national governments during initial contact and present day periods.
- Select a major historical event from those studied and illustrate a cause-effect relationship which produced its significance.
- Find comparable elected offices between Tribal and state officials in terms of duties and responsibilities (e.g., chairman, governor, councilman, representative, etc.).
- Select and prepare a defense for one side of a local issue which brings in its historical background (e.g., redistricting chapters, Navajo constitution, rights of way, etc.).

- Trace sample legislation through either the Tribal or state process from initiation to enactment.
- Evaluate various tools historians must use in terms of their probable reliability (e.g., official documents, diaries, eye-witness accounts, artifacts, etc.).

Eighth graders are expected to:

- Plot a time-line for a given period of history being studied.
- Outline Navajo history from 1868 to the present.
- List the primary functions and responsibilities of the Navajo branches of government (executive, legislative, and judiciary) and describe how any could be amended.
- Explain how the Navajo Nation election process is conducted for Chapter and Tribal offices (e.g., nominations, qualifications, voter registration, primaries, etc.).
- Research and prepare for a debate, either for or against, on a given local or Tribal issue.
- Compare and contrast the way other school subject areas have influenced history, past and present.

These expectations become significant when one realizes that the students at this school are expected to function skillfully in two distinct societies.

In South Dakota the members of the Sisseton-Wahpeton Sioux Tribe over the years found themselves questioning the ability of the public schools to meet the educational needs of their children. Discontent with the public school treatment of Indian culture played an important part in the decision of the tribe to establish a new tribal school, the Tiospa Zina School. Formed in 1981 and originally funded exclusively from tribal sources, the Tiospa Zina Tribal School (grades K-12) became a Federal contract school in 1986. The formally stated goals of the school are:

- To provide an alternative educational process other than the public educational process to students of Indian ancestry; an alternative educational process which will take into perspective the culture, heritage, and social background of the Indian student;
- To develop educational programs relevant to Indian culture, history, art, language and tradition to be used in the alternative educational system
- To develop, implement, operate and evaluate basic education programs (K-12) to be used in the alternative educational system;

- To further the educational alternatives available to parents of Indian children by developing, maintaining, and operating educational institutions governed by the School Board;
- To advocate, sponsor, and support the availability and utilization of resources and personnel to aid in the advancement of educational opportunities for Indian children;
- To formulate educational curricula relevant to the needs of Indian people and communities;
- To advance Indian self-determination through higher education of Indian people;
- To enhance the development of academic curricula related to the alternative educational system;
- To provide for and to facilitate the presentation of works relating to the cultural and artistic endeavors of the indigenous people of North America;
- To employ education personnel adequate to fulfill the purposes set out above.

As a contract school, the Tiospa Zina Tribal School has sought and earned accreditation from the State of South Dakota. Moreover, as the principal writes, the school seeks to ensure that materials in Indian culture are an addition to, rather than a substitute for, the learning of the basics of reading, writing, mathematics, and other subject matter:

> In addition to these standards, the school is attempting to meet all standards of the Bureau of Indian Affairs. The curriculum and requirements of the School Board and Tribal School require "more than" rather than "less than" of students, requiring 1,700 minutes of instruction weekly at a minimum for all grade levels (exclusive of intermissions) for a 184 day in session school term for 1987-88. The existing graduation requirements for grade twelve students numbers (22) units of credit, above the (19) units which are required by the Division of Education and Cultural Affairs. Dakota Language and Dakota Culture are requirements of instruction K-8, as well as graduation requirements for 9-12 students. The 1987-88 school term will provide for the first year of vocational education options for students; expanded resources in computer equipment will enable expanding implementation of Computer Literacy coursework and learning activities.

While some tribes are looking to the schools for greater education in tribal history and culture, other tribes see the schools only as the bridge for Indian students to the outside world. They regard Indian history and culture as the responsibility of the parents and the traditional community, and reject a role for Federal schools in such

matters. The principal of the San Felipe elementary school, serving the San Felipe Pueblo in New Mexico, writes that:

- The students who come to San Felipe Elementary School from the San Felipe Headstart speak a primary language of Keres. Approximately 85% of the students entering San Felipe Elementary School at the kindergarten level speak no English, or have little knowledge of English. The school program, with this fact in mind, is geared toward making the students confident in English before they graduate from the sixth grade into the local public school system.
- San Felipe today is one of the most culturally conservative pueblos. The people of San Felipe place great emphasis on traditional community values and social/religious responsibilities. The native language and religion play a vital role in their total behavior and outlook on life. They place great emphasis on maintaining and protecting their tribal traditions. Accordingly, the San Felipe Tribal Council has stated that the responsibility for teaching language and culture to the children of San Felipe belongs in the home rather than the school.

The Teachers

Good education depends on capable and committed teachers. Much like other school systems, the BIA has sought in recent years to improve the training and skills of its teachers. Inadequate education, high turnover and low expectations for Indian students have been problems in the past for some BIA teachers. In response, BIA teachers are now required to obtain state certification. The BIA has sought to increase the proportions of Indian teachers. Efforts have also been made to combat high turnover by improving the working environment of schools and by hiring teachers who have roots in the state and local areas and are thus less likely to leave. Programs of in-service teacher training have been expanded.

Almost all teachers in BIA schools today possess state certification, or will shortly receive it. The principal of the Wingate Elementary School, 15 miles east of Gallup, New Mexico and serving a Navajo population, writes that:

> The faculty at Wingate Elementary School consists of forty-five (45) professional and seventy-two (72) para-professional staff members. Of the professional staff, all possess one or more degrees in education and/or related fields. Nearly all of the teachers have regular certification with the state of New Mexico and the remaining few are on provisional status. Professional affiliations include teachers organizations such as NEA, NCBIAE, NMEA, etc.

In South Dakota, the principal of the Little Eagle Day School similarly reports that:

> The faculty is composed of a principal, five (5) regular teachers, two (2) Chapter 1 teachers, one (1) special education teacher, two (2) Title VII teachers, one (1) cultural studies teacher, (certification waived) and one (1) aide. Of the thirteen faculty members, five are Native Americans of the Hunkpapa Sioux Tribe. All teachers are fully certified by the Elementary/Secondary Education Department of South Dakota. The exception is the cultural studies teacher whose certification is waived by the Bureau of Indian Affairs. However, the cultural studies teacher is lacking eight (8) hours toward an elementary teaching certificate. The aide completed two years of community college work. All teachers and principal employed here since 1971 have been certified. Little Eagle Day School has been accredited by the State of South Dakota since 1971. Northwest accreditation will be sought in the near future.

The problems of rapid teacher turnover and hiring an Indian staff are often closely linked, because the number of non-Indian teachers willing to spend many years in isolated reservation locations is inevitably limited. This problem is seen in an extreme case for the Havasupai, who are located, as noted above, in the bottom of a canyon near Grand Canyon National Park. The principal of Havasupai Elementary school explains that:

> The certified faculty is made of seven certified non-Indian staff. A Principal, five regular classroom teachers and a Special Education teacher. The average stay for teachers is one year and until this year the Administrator had changed every year. This is largely due to remote conditions, low pay, lack of social and recreational advantages, and living conditions. The state universities and surrounding colleges aid in the recruitment process.

Another very isolated school, Navajo Mountain Boarding School, faces similar problems in turnover. Its principal explains:

> All of the paraprofessionals on the faculty are from the community or have made it their permanent residence. The turnover rate is very low. The professional staff consists of twenty percent Indians and eighty percent non-Indians who represent many regions of the United States. Most of them are fully certified for the positions they hold. The others are provisionally certified. The turnover rate among the professional staff is as high as forty percent yearly. Some positions requiring specialized degrees have been hard to fill. This is due to a combination of factors; salaries lower than public schools, isolation (ninety miles to a shopping area), extra expenses incurred due to the length and condition of the unpaved road and lack of adequate housing.

In the Northern Great Plains, non-Indian teachers may feel less cultural isolation, because Indian and non-Indian land and populations are extensively intermingled.

Nevertheless, high turnover remains a problem for some schools. Inadequate housing on or near reservations and consequent long commuting distances hinder the long term retention of teaching staff. The principal of the Standing Rock High School in North Dakota writes that:

> The faculty of the high school has been made up of Indian and Non-Indian educators that are drawn from several neighboring states. The faculty is comprised of fully qualified personnel that are certified by the State of North Dakota. The faculty consists of 13% Native American teachers and this has been a consistent trend for the past few years. Due to a variety of reasons, including adequate housing availability, at least 50% of the staff commute to work daily, with most of them driving 70 miles one way to work. The turnover rate has been between 15-20% in the past two years due to a variety of reasons. Teachers are recruited from the immediate area and by nationwide advertising conducted by the B.I.A. and are recruited on the basis of Indian preference and program needs.

Low teacher pay in some areas compounds the problems of isolation. As many public schools have raised salaries and Federal pay has remained stagnant, the BIA schools have gradually shifted from being high paying schools in the 1970s to low-paying schools in the 1980s. Moreover, BIA in some areas charges much more for housing (both BIA and public schools in some areas provide housing for teachers). The more capable teachers in the BIA system find that they can do better in nearby public schools and some choose to leave. The principal of the Chuska school on the Navajo Reservation in New Mexico explains:

> The dormitory and food service staff have been most stable with a turnover rate of less than 5 percent. The recreation staff has the highest turnover rate of 50 percent with the academic rate being approximately 22 percent. The reason for turnover of para-professionals is due in part to retirement and job dissatisfaction. Teacher turnover is mostly due to the higher wages being paid in the public schools. Public schools in the surrounding areas pay an average of $3,700 more per year.

The principal of the Wingate Elementary School in New Mexico similarly explains that "the turnover rate for professionals was 16 percent in 1987. Seven percent of the paraprofessional positions were vacated. The high turnover rate for professional staff members can be attributed to better salaries offered in nearby public schools." The BIA salary disadvantage is most severe in the Southwest, where rapidly growing and well-off states can afford to raise public school salaries. In the upper Midwest depressed state economies have kept public school salaries at levels comparable to BIA teacher pay. The principal of the Ojibway School in Minnesota writes that:

> The staff of the Ojibway School is over two-thirds American Indian. The staff are from various parts of the country, primarily Minnesota. College and university backgrounds are as diverse as the geographic origins. The

> certified teaching staff is predominantly non-Indian. Thirty percent of the certified teaching staff are Indian. The staff, for the past four years has been extremely stable. This is due to the level of dedication of staff, the comfortable atmosphere at the school, and a comparable salary schedule for staff, in particular teachers. The Board of Education has instituted a staff development program to encourage instructional staff to further their education. There are five teachers actively seeking their Master's Degree. Two teacher's aides are planning to attend Community College classes next year.

Some schools have been able to recruit and retain a high calibre faculty, despite salaries that are not competitive with nearby public schools. The Sherman off-reservation boarding school, located in Riverside, California (population 200,000) does not face the isolation characteristic of many Indian schools. Its principal reports that:

> The professional staff of SIHS (30 teachers, 3 counselors, one school psychologist, 5 department heads, and assistant principal and principal) have been employed here an average of seven years. Turnover has been minimal for the past four years. Last school year, for example, two teachers resigned (one for health reasons) and one retired (again, for health reasons). The minimal turnover is remarkable when one considers that BIA salaries, compared to local school districts, are between $6500 to $15,000 less. Out of the group above, nearly 70% have a California credential. Those without a credential are the status-quo employees. Thirteen individuals have masters degrees and three have doctorates. Nine of the above group are Indian, including the Principal and six of the teaching staff. The professional staff have come from all over the United States and offer many talents and skills, reflecting this diversity. Recruitment is done via "open/continuous" vacancy announcements issued every six months for all types of positions. Announcements are sent to over 90 colleges, universities and school districts in California, BIA schools and BIA Agency offices within the Phoenix Area. Due to rigorous standards, including a passing score on the C-BEST, it is difficult for out-of-state applicants to obtain a California credential. Since our enrollment has declined, we have not been faced with the difficulty of having to compete with higher-paying school districts for teachers and our current teacher-pupil ratio is excellent, providing for much more individualized and small group instruction.

Turnover also has not been a major problem for the three small day schools on the Cheyenne River Sioux Reservation, due partly to the hiring of local staff:

> All teachers in Promise, Swift Bird and White Horse Day Schools are fully qualified and certified by the Department of Education, State of South Dakota. Most of them are natives of South Dakota and have a good understanding of educational, social, economic, and cultural needs of In-

> dian students. There is some turn-over of teachers but it is not abnormal. Most teachers have been in the system for more than three years and some of them even for seven and eight years. Recruitment of teachers has, so far, been done by advertisement through colleges and universities placement offices, interviews and selection by respective school boards and final appointment by the BIA officials. Almost one week preceding the re-opening of schools after summer vacations, is devoted to in-service program of teachers. During the school year also occasional in-service workshops and training opportunities are provided teachers and the support staff in Curriculum, alcohol and substance abuse and other areas related to child protection and assistance. The in-service is conducted at school level as well as at Agency level with all the schools in the system participating.

Other schools have also sought to bolster their in-service training programs. The Tiospa Zina Tribal School has a teaching staff of whom 55 percent are members of the Sisseton-Wahpeton Sioux Tribe. As a new contract school, it has sought to instill a high morale and esprit de corps among its teaching staff. The principal of Tiospa Zina Tribal School writes:

> Overall staffing at the Tribal School consists of employees having a high level of commitment, dedication, perseverance, and competency. During the initial contracting term staff worked through many developmental, communication, structural, policy, and other activities. Having this initial year of experience as a K-12 Contract School has greatly enhanced the capabilities of the staff in meeting the developmental needs of students, and the institution. A four-day intensive preservice was conducted in August, 1986, prior to the beginning of the school term; other inservice training for all staff was held on the topics of Alcohol/Drug Abuse; other inservice conducted for various groups included BABES; Language Experience Approach to Teaching Language; Dealing with Anger, Child Abuse and Neglect; Curriculum Development; other related areas of training. The administration will be conducting a comprehensive staff inservice training assessment with all personnel of the school on September 2-4, 1987, in preparation for the new term inservice training program. The Preservice training will focus upon Alcohol/Drug Abuse; Choices for Boys and Girls; basic conditions of employment; comprehensive educational planning; team-building; cultural awareness; and, activity planning. The preservice training is a requirement of all personnel.

Parents and Students

A successful school involves the participation of all members of the community--teachers, parents, and students alike. Indian families in many cases lack the educational and economic advantages of other American children. Nevertheless, Indian parents have in recent years begun to play a much greater part in the education of

their children. BIA and contract schools have sought to devise new instructional and other techniques and programs to meet the special needs of Indian students.

Language is, as described previously, a major problem for many Indian children, who even today enter school speaking their native Indian language, and little or no English. For example, the principal of Wingate Elementary School in New Mexico reports that:

> The majority of the students enrolled at Wingate Elementary School are from homes where the Navajo language is the primary means of communication. A large percentage of the students still live in geographically isolated areas and are unable to be served by a day school. Also, many of the students come from socioeconomic home conditions which necessitate attendance at a boarding school.

Wingate is like many Indian schools in having a major problem with a transient student population. Many Indian students have several educational options; some of them switch back and forth frequently among these options. If one school is proving difficult or unsatisfactory, Indian students show an unusual ability and willingness to transfer elsewhere. The principal of Wingate Elementary School writes:

> A 1982 study indicated that of approximately 12,825 Navajo students in the Eastern Navajo Agency, 58% are enrolled in Bureau funded schools with the remaining school age students attending public, private and mission schools. Recent developments of roads and living conditions do not seem to have decreased the percentage of Bureau school enrollment, possibly because of the high unemployment rate present in McKinley County. Approximately 25% of the students at Wingate Elementary School withdraw during the school year and enroll in public school while 20% will enter Wingate from the public school.

Transient student populations have been a particular problem at off-reservation boarding schools. Despite its long tradition of Indian education and attractive physical facilities, the Chemawa Indian High School in Oregon loses 50 percent of its students every year, making educational continuity an impossibility. Chemawa's principal explains further:

> Movement between secondary and alternative education programs is characteristic of our students: 22% have attended one high school; 48%, two high schools; 24%, three high schools and 6%, four high schools. These figures reflect the number of different schools attended, <u>not</u> the number of actual secondary enrollments, which is a higher number yet (i.e., more than one enrollment in the same school). The term "drop-out" is a misnomer since students characteristically move within the current education system available to them; i.e., public school, tribal school, alternative programs, boarding schools and Job Corps. Of the 53% of stu-

> dents who left Chemawa this year, more than 3/4 requested transcripts to attend other schools. 78% of the total Chemawa Student Body this year were transfers from or have attended other programs. Just as students tend to continue their high school education, most graduates also enter into post high school education programs, but ordinarily this occurs one to two years after graduation either because they need to work, have insufficient funding for vocational programs, or need to be home at least a semester after graduation. Over 50% of graduates go on to school. A well-documented follow-up study would reflect a higher percent. Increasingly, students are going into military service following graduation, scoring high enough on the ASVAB test to enter specialties of their choice.

The high transiency of student populations in off-reservation boarding schools also reflects the demands placed on these schools to educate children who already have significant problems of one sort or another. The principal of Sherman Indian High School in California writes:

> Due to the current admission criteria for off-reservation boarding schools, about 25% of our students are here due to behavioral or truancy problems. The Intensive Residential Guidance (IRG) program is structured so as to provide a variety of counselling, tutorial and recreational activities to assist these students to become more productive and develop a more positive self-image. Many of these students also need much remedial work, as their behavioral problems have effected their school progress. An additional 25% to 50% of our students, when tested in the ninth grade, as a class, are approximately 2-3 grade levels below national norms. This 2-3 year gap persists through the 12th grade. It is quite frustrating for staff to try to remediate a skill deficiency, such as reading, that has been allowed to deteriorate during the 8 or so years a student has been in school prior to coming to Sherman. On the other hand, those individual students who test at or above grade level continue to maintain these scores and are not held back by other students. Although funds for the gifted have been minimal, Sherman provides the STEP program, and during the past year, has seen 50 students benefit from the additional attention.

One of the major problem areas for Indian students--like many of their parents--is alcohol abuse, often linked to withdrawal from or poor attendance in school. The BIA in recent years has sought to develop programs to address the alcohol problems of its students. The principal of Chemawa explains:

> Retention is affected by age, grade and behavior. The higher the grade level the higher the retention rate. Older students in higher grades have diminishing options and more concern for high school completion. Alcohol-related behaviors are the most frequent reason for suspension and

> expulsion. We have indicators from student-wide testing to believe depression also plays a part in retention rate. We believe this correlates with issues of self-esteem and repeated school failure before enrollment. We are still educating many students who are the first in their families to complete high school or in the first generation of graduates in their families.
>
> The Chemawa Alcohol Education Program is multifaceted, offering a variety of regular culturally based activities in cooperation with school staff. Two recreational therapists offer high-risk outdoor, developmental and group process activities for Intensive Residential Guidance students targeted because of substance abuse problems. 75% of students have alcohol as a major area of dysfunction in their families, based on the CAST screening instrument administered to the students this year. Chemawa School and the Chemawa Alcohol Education Program, in cooperation with IHS, is implementing a program initiated last spring that brings students through a process of assessment and outpatient treatment with 10 contracted alcohol residential treatment beds at nearby Red Willow, an adolescent alcohol treatment center, available for the estimated 5% of addicted students. This program will impact an additional 20% of the students with substance abuse problems serious enough to warrant suspension and/or expulsion. By concentrating School, IHS and CAEC staff and resources on this problem area, we will continue to improve retention rate for this group of high risk students.

Alcohol is only one of the problems that many Indian students must overcome to achieve success in school. Indian children often live in environments marred by violence, poverty and social breakdown. The principal of the Little Eagle Day School describes the difficult environment from which his students come:

> Ninety-five percent of the fifty-three (53) families who have children enrolled in school have an income which is derived from either state or federal welfare. The unemployment rate is high. The exact percentage for the locale is unknown at this writing. Only two (2) work sites are available in the community, the school and Headstart Center. Only about ten (10) community members can be employed at these sites.
>
> Recent studies have indicated a direct correlation between family income and academic achievement. The average education level also makes it difficult to secure the employment needed. This contributes to the negative self concept of both student and parent. Often family and group conflicts arise. Family disorganization is evident. Of the fifty-three (53) families, twenty-two (22) are single parents. Twelve (12) of the families are grandparent guardians.

> There are many social problems created by the lack of economy. Idleness, substance abuse, apathy and quite recently within the past two (2) months, three stabbing deaths with a total of seven (7) persons indicted, facing possible life incarceration. One of these deaths involved a high school honor student who came to visit his mom for one evening! Due to high rental and utility fees in government quarters, the police assigned here moved to a neighboring town ten (10) miles away. There is no steady police protection and communication is poor since there are only three (3) phones in the community.

The BIA operates a number of dormitories for students who live in isolated locations or for other reasons are unable to attend public schools as day students. In this way BIA enables these students to live in BIA dormitories while attending public school. The principal of Carter Seminary in Oklahoma writes that:

> The Dormitory Program served a total of 230 students during 1986-87 school year. The official count was 133. The authorized enrollment is 128 and serves grades 1 to 12. The enrollment boundary includes Oklahoma and adjoining states. The enrollment is primarily made up of the Five Tribes of Eastern Oklahoma; however 23 tribes were represented this past school year. Most of the students are below age-grade level. Many factors contribute to this, including poor home situations, alcohol and drug abuse, neglect, broken families and unemployment.
>
> The campus consists of 24 acres with modern buildings. The dormitory is co-educational with common living, T.V. room and game rooms for the students. The buildings are all in good repair and well maintained.

Another dormitory is located in Eufaula, Oklahoma. The principal of this contract dormitory writes:

> Eufaula Dormitory, contracted by the Creek Nation of Oklahoma, houses 128 students. The Dormitory is co-educational and serves grades 1-12. The students of Eufaula Dormitory attend Eufaula Public Schools. Eufaula Dormitory enrollment has been above capacity the past two years. The faculty of Eufaula Dormitory are considerate of students, firm with discipline and dedicated to the job of caring for young Indian people. The past three years we have had no turn-over rate and have had to supplement and train five employees through Tribal Programs because of the number of students we have had. Eufaula Dormitory student enrollment has climbed at record rates.
>
> Through constant encouragement, Eufaula Dormitory students have accomplished many successes. Acceptance in the Eufaula Public School and not just existence has been the key.

> In the past three years Eufaula Dormitory has placed 30 or more students on the Honor Roll per year. Eufaula Dormitory had 35 boys who participated in football. The first year of contracting there was one participant. Three months of the nine months, Eufaula Dormitory had the "Student of the Month" Award. Eufaula Dormitory had the Girl's basketball leading scorer for 1986-87, had six varsity wrestlers, three varsity starters in baseball, and two superior band ratings.

In Utah, the public schools of the Sevier School District have proven agreeable to accepting students from the Navajo Reservation. As the principal of BIA's Richfield dormitory explains, its presence allows Navajo students to take advantage of this opportunity:

> Currently the dormitory houses approximately 130 students grades 9-12 that attend school at Richfield High School, South Sevier High School and Sevier Valley Tech. Students from the Western Navaho Agency are eligible to attend school in the Sevier District while residing in the Richfield Dorm. The Navaho people of the Western Navaho Area realize the quality education offered through the public school district and the opportunity for vocational training at the Sevier Valley Tech.
>
> Attached is a report of the students overall academic achievements in the Sevier School District. Approximately 50% of the graduates go on to advanced educational programs. The Sevier School District has excellent academic results as shown in the attached report.
>
> The relationship that exists between the Navaho students and the educational system is excellent. Both public schools utilize Chapter 1 funds to provide professional assistance to the students. When the students arrive at the beginning of the year they are tested, and programs are designed and developed to meet the academic needs of the Navaho students.

Greater involvement and support of Indian parents is vital in improving Indian education. Many Indian parents have in fact been seeking to help out, even when they have been somewhat unsure how to do so. The principal of the Navajo Mountain School writes:

> The desires of the Navajo Mountain parents are like most parents. They want their children to learn and do well in school. Since English is the second language in almost all homes, the school focus has been on the development of English language skills and basic mathematics skills. The grade equivalent mean test score for all students completing the sixth grade on a nationally normed achievement test showed the students at Navajo Mountain eighteen months behind the national average mean score for students at this grade level.

> Parents involve themselves in the school by attending and participating in school functions like talent shows, movies, cultural and athletic events. Some parents hike each spring the fourteen miles into Rainbow Bridge and back out again with the sixth grade class. The school has not yet been fully successful in getting full participation in classroom programs that directly relate to improvement of basic academic skills. Programs for students are available such as spelling contests, science contests, speech and poetry contests. The students have placed high when competing in these contests with students from other schools in the Western Navajo Agency.

In Fort Yates, the Standing Rock High School has sought to obtain greater community involvement with the school. As its principal indicates:

> The community of Fort Yates is involved in some of the activities of the school. A parent/teacher organization has been organized during the last three years to facilitate school-community interaction. The meetings have been sparsely attended, but continued efforts will, hopefully, create more involvement. School sponsored athletic events, such as football and basketball contests are fairly well attended, but not the full support as other communities receive. Parent/Teacher Conferences are attended by approximately 25-30% of the patrons. Newsletters describing certain events and letters of invitation are sent to parents to encourage their participation at school sponsored functions, the school board is elected at large on the reservation, with anyone who wishes to be elected need only to file a petition. The board is charted under by-laws of its constitution. The chairman is selected by the board at its first regular meeting following the annual election. The council supports the board in carrying out its requests for such items as 638 contracting as needed. Local businesses of which there are few do support the activities of the school by donating money to many class organization sponsored endeavors. A Parent-Booster Club levels its support by working at athletic contests and by sponsored scholarships to deserving graduates at commencement exercises. The local Businessmen's Club sponsors an award given to a deserving academic/athletic achievement as part of a local memorial scholarship.

One of the main objectives in the enactment in 1978 of the Education Amendments Act (better known as P.L. 95-561, or simply "561") was to promote greater Indian involvement in the running of BIA schools. This policy for Indian education is, of course, part of the broader policy of Indian self-determination. While the change has not occurred overnight, a number of principals reported substantial progress in this regard. The principal of the Little Eagle Day School reports that "The School community relationships have improved greatly since the inception of P.L. 95-561. More parents are involved in the education process." The principal of the Lower Brule Day School in South Dakota writes that "The community is involved in the activities of

the school as much as 80% attending school functions, including Christmas and spring concerts, sporting events and special picnic affairs." Moreover, "The elected tribal council members of the tribe also serve as the school board. There is a high rate of parents attending parent/teacher conferences. In addition a close relationship exists with the school for overall academic achievement."

In the Southwest, the principal of the Dzilth-na-o-dith-hle School reports that Navajo parents are also assuming a growing role in the education of their children:

> The Dzilth-na-o-dith-hle School Board meets and confers with the school's administration, staff and students as well as with the Bloomfield Public School's Indian Education coordinator on a regular basis to look after the interests of their students. Additionally, the Indian Education Coordinator has a parent advisory council with representatives from the three chapters. The School Board meets with this council and has established communication links through the school as well as with the chapters. Thus, articulation between both schools is established with student progress and problems addressed.

In New Mexico, the principal of the San Felipe Elementary School writes:

> Parents at San Felipe are concerned with their children's education and are involved in the educational process. The local Parent-Teacher group meets once a month and is an integral part of the educational program. Several pieces of equipment were bought from funds raised by the parents. There are several parents on the school's activity committees.

Enactment of the Indian Self-Determination and Education Assistance Act of 1975 (P.L. 93-638) sought to promote greater contracting for the delivery of Indian services to tribes themselves. By 1988, 30 percent of the students in BIA-funded schools were attending contract schools. The principal of the Theodore Jamerson Elementary School, a contract school in North Dakota, reported active parent interest and involvement in the operation of the school.

> Parental cooperation and support is very good at Theodore Jamerson. Turn out for parent/teacher conferences usually ranges between 85% to 90%. Other events such as potluck dinners, open house and school programs also show enthusiastic parent support.
>
> The School Board is made up of 5 elected members who meet monthly to guide and advise the administration of the school. The members take part in training as offered by the national associations.

Similarly, the principal of another contract school, the Leupp Boarding School, writes that:

> The Leupp Boarding School, Inc., School Board is elected every four years, two members from each of the three communities. As a contract school board, it is responsible for hiring of all personnel as well as making and/or approving all policies of the school. The School Board and the Director work together to articulate and strengthen the vision of an education that promotes tribal self-sufficiency.

Extra-curricular Activities and Special Programs

Extra-curricular activities can play an important role in developing a strong sense of a school community, something that contributes to educational success as well. Sports often play a particularly important role in this regard, and Indian schools typically have active sports programs. Some of them report considerable competitive success. The principal of the Bullhead Day School (K-8) in South Dakota writes that:

> For extra-curricular we have cross-country, girls basketball and boys basketball. We had a very successful season in these areas. Cross-country team placed high in all of their meets. Successful season in both girls and boys basketball teams winning championships. The ironic thing is that we do not have a gymnasium at our school. We either practice outdoors or borrow the facilities from our neighboring bureau-operated school, Little Eagle Day School.

In Montana, the leading extra-curricular activities in the Rocky Boy High School include sports and community work to combat alcohol and drug abuse. The principal of Rocky Boy writes:

> Some of the outstanding programs in the high school include our outstanding athletic program with a state championship in Boy Crosscountry and second and third place finishes as well; third place in Girls Crosscountry the first year they entered in 1986; third place in Boys State Basketball in 1987; and numerous district and divisional championships in Basketball and Track. Our Community Action Team (team of school faculty, students, parents, and community agencies combatting alcohol/drug abuse) was formed in 1985 and is very active in sponsoring drug & alcohol free activities. The team also sponsored our Hawaiian/Rocky Boy Student Exchange Program in 1987 where we sent 15 drug/alcohol free students to Hawaii during the Spring of 1987 and hosted 9 of their drug/alcohol free students in the Summer of 1987.

Extra-curricular activity can provide an important means whereby Indian students gain exposure to and recognition in the broader world beyond the reservation. The principal of the Ojibway School in Minnesota explains:

> The school provides a number of co-curricular activities for students. There is a school newspaper for juniors and seniors as a course elective.

> The Student Council has representatives from all grades. The Council also has a representative on the Board of Education. The Pow Wow Club is the school's drum group. They also have a number of traditional dancers who are active in area pow wows. This group hosts and plans the school's annual pow wow. For the past two years, the school has sponsored a trip for students to Washington DC through the Close Up Foundation. The program is a week long trip to the nation's capitol for students to learn first hand about the operation of the federal government. They also get the opportunity to meet the congressional delegation.
>
> The school's communications teacher regularly enters students writings into contests. Student works were sent to and published by the *High School Writer* and the *Cloquet Pine Know* and the *Duluth News Tribune*. One student won a Creative Writing Contest sponsored by the *Tribune* for a poem he wrote about the Tokyo Stock Exchange. For his efforts he was awarded the typeset page the *Tribune* used for publicizing the contest complete with his picture.

Extra-curricular activities can offer the opportunity to single out individual students for attention, giving them recognition while also emphasizing the bonds of friendship and camaraderie that bring together the school community. The principal of the Fort Thompson Elementary School in South Dakota reports that:

> The Fort Thompson School being student centered has focussed on promoting recognition of students through out the school year. At least once a month we recognize the students who have birthdays, through having a mini pow-wow for all students at the school. There is a honor song sung for the students who have birthdays as well as several social round dances for all to participate in. The birthday students are given ribbons that designate them as such. We also invite the parents/guardians to the school once a month for visitation. The parents/guardians come to the school to visit the classrooms and have lunch with their children. We also recognize students on a weekly basis by selecting students of the week. This notice is posted on the bulletin board in the hallway so that all can see who made this list. The students also get a laminated certificate designating them as the student of the week for their particular grade.

Some BIA schools have achieved national recognition for their programs. The St. Stephens Indian School was founded in 1884 by a Jesuit priest. Now a contract school, it was recently given national recognition as one of the best schools in the nation. Some BIA schools have been invited to participate in nationwide efforts to develop innovative teaching and administrative methods. The principal of the Greasewood-Toyei School in Arizona reports:

One of the unique programs at Greasewood-Toyei School is the Mastery In Learning Project (MILP). The school was one of the six pilot schools selected nation-wide to participate in the project sponsored by the National Education Association (NEA) for school year 1985-86. MILP began with an eighteen month pilot phase (March 1985 August 1986) which delineated project goals and strategies. An information base of research and previous reform efforts was compiled for staff use. Material was developed and different techniques were tested throughout the school year. The project was organized using the following activities: a detailed description of the school was developed, a faculty inventory was conducted, staff explored/reviewed educational research material on learning, teaching, curriculum, and school reform, and staff developed a school improvement action plan, tested it and implemented it. The five initial areas (according to staff inventory) were: Whole Language: Student Evaluation; Testing; Instructional Material; Student/Parent Attitudes Toward Education; and Stability and Continuity. Committees were organized and a Chairperson was selected for each of these areas. Staff members worked as a team to find solutions and develop a program that would improve these areas. At the end of the year final reports were submitted and analyzed for future reference. In Phase II (school year 1986-87) areas of concern were similar to the ones in Phase I due to the consolidation of Greasewood and Toyei Schools. The same procedures were used to identify the areas of concern which were: Whole Language; Parent/Student Attitudes; Curriculum Revision; and Community-School Public Relations (liaison). The MILP played a major role in making the transition of consolidation much easier than anticipated since staff were required to work as a team with one goal in mind, that of providing an Educational Program that emphasizes "Mastery In Learning". One of the highlights of the MILP Project at Greasewood-Toyei School (GTCS) this past year was a visit by a group of Cameroonians from Africa. Dr.Sam Stimple, the site base coordinator from Northern Arizona University through NEA and the University of Southern California coordinated the visit. The GTCS student council planned, organized and played host to the group by taking them to visit classrooms, served lunch to them and presented them each with a gift from Navajoland. The student council members made quite an impression on the visitors. They set up the family style dining room so that one of the gentlemen was seated at a table with several students. It was very impressive to see our students carry on conversations and talk about their culture, family, and school visitors. According to Dr. Stimple, the Cameroonians' visit to Greasewood was the highlight of their two week visit to the United States. This is only one of the many activities the Student Council gets involved with. They are very active and play a major role in all areas of the School Program.

Outside recognition of school programs and activities shows students that they can successfully participate in the broader society and can do much to enhance their self-

esteem. It builds pride and enthusiasm among parents, teachers and students alike. Connected to its whole language program, the Wingate Elementary School in New Mexico has been a leader in encouraging its students to write and perform for fellow students and parents, as well as for outside groups. Its principal writes:

> The school is becoming known as a "model" for whole language teaching. Numerous educators, from both BIA and public schools, have requested to visit the program and observe first-hand the program. And requests keep coming in. Also, the school's education specialist has provided whole language training in Navajo area schools, again both in BIA and public, on numerous occasions.
>
> One administrator and one teacher are now involved in a Whole Language Consortium, comprised of several BIA, public, and contract schools serving Navajo children. The objective of the consortium is to develop a written curriculum for whole language appropriate for the school's populations.
>
> Some of the whole language activities include SSR (Sustained, Silent Reading), literature studies, process writing workshop, journal writing, environmental print, shared book experiences, thematic units, transformations, and inquiry strategies. In the area of writing, excellent progress has been noted. Students at all grade levels are writing their own stories and publishing them for use in classroom libraries.
>
> One sixth grade class last year had a goal of 300 student-authored stories, and these prolific authors published a total of 343. This class set a goal of 400 stories, and at the end of the first semester had already written 301.
>
> To enrich the writing program, the school has secured the services of a consultant, Mick Fedullo, during the past two years to help train teachers to work with poetry. The result of his work is a beautifully published calendar of student-authored poetry and student art, much of it reflecting their culture and reservation life. Another publication is planned for this year.
>
> A creative writing contest is in progress at the present time in the categories of fiction, essays, poetry, dictated stories, and group/class stories. Awards will be given to the winners in all categories at all grade levels.
>
> A new reading program has been started this year to encourage more leisure and self-selecting reading. WKRP (Wingate Karate Reading Program) awards karate belts (ribbons), all the way up to a black belt, to students who read so many books.

The residential department assists the academic program by conducting a study hour in the dormitories four nights a week. Homework or class assignments are completed during this time. A part of the study hour from 20 to 30 minutes, is designed for additional self-selected reading. This program, called "Million Minutes," is now in its third year. The first year, the students were challenged to read a cumulative total of one million minutes. When the students surpassed their goal in May, the Student Council requested that the staff come to school one day dressed as "punk rockers" and most personnel cooperated. Last year when the students met their goal of 1,250,000 minutes, the staff dressed up as cartoon or story book characters everything from Kermit the Frog to Tom Sawyer. This year the goal has been raised to 1,350,000.

Special days are celebrated throughout the year to capitalize on holidays and special events as well as everyday life. Some examples are T-Shirt Day, Hat Day, Thank You Week, Red Day, Christmas Card Day, American Indian Week, and Heart Days. Teachers are requested to plan whole language activities to tie meaningful languaging to the special days.

A vital part of the whole language curriculum are the school's theatrical productions. Two major musicals are staged each year, one at Christmas and one in the spring. The Christmas play, sponsored by the junior high but involving 100 students from all grades, is entitled, "Three Wee Kings." This play, an annual tradition of three full performances, has costumes, lighting, sets, sound track, choir, and choreography. The *Gallup Independent* reported this year about the play: "It's not the scene for a Broadway production, but the play is as close to professional as you'll get with amateurs. And these amateurs are grade school students, no less." This year, the students will attempt to perform the Shakespeare play "MacBeth."

Conclusion

The system of BIA-funded Indian schools has about 38,000 students. Many big-city school systems and even some suburban systems have many more students. Yet, the system of Indian schools encompasses an enormous geographic and cultural range. The diversity of the BIA system is unique in American education.

In asking principals to write briefly about their schools, the Office of Indian Education Programs sought only a limited sample. Yet, even this small sample has effectively conveyed the very wide range of circumstances that face Indian educators. Most schools serve a student population that lacks the educational advantages of homes with high education and income. Many BIA schools have had difficulty in seeking to bring their students to a level of educational achievement comparable to other students in American education. Some schools, however, have been more successful, in part because they have experimented with new ideas and methods. It is to be hoped

that communication within the system of Indian education can be improved to allow for a more rapid dissemination of such successes, and greater exchange of ideas among the members of this system.

CHAPTER IV

The Performance of BIA Students on Nationally Standardized Tests

Evaluation of the performance of schools is complicated by the fact that they have many different goals and purposes. Schools offer role models for the young and education in the values of the community. They teach standards of punctuality, proper dress, courtesy to others, and generally the codes of proper conduct expected in society. These and other elements of education are difficult, if not impossible, to measure in a formal and objectively quantifiable way.

There are, however, other aspects of educational performance that are more readily measured. Schools are expected, above all else, to teach their students how to read, write and spell; do mathematics; comprehend the basic facts of their own heritage; know the key political and economic workings of their society; and understand other basics of education. Through standardized tests it is possible to measure--at least in a rough fashion--the degree of knowledge that students possess in these areas. Indeed, there are a variety of national tests given to elementary and secondary students each year. Because these tests are taken by students all across the United States, it is possible to compare student achievement in individual schools with the typical levels of achievement of fellow students throughout the United States.

Use of standardized tests has been controversial, however, especially with respect to minority children. Some critics contend that the tests are designed for children with the background and outlook of mainstream America. In implicit and sometimes subtle ways, the tests may discriminate against children who bring to the tests a different cultural experience and outlook. There is little expert consensus on the validity of such criticisms and the degree of validity may vary among different tests such as mathematics and language. Nevertheless, one of the main purposes of education-- including Indian education--is to prepare students to understand, deal with and function well in the cultural context of mainstream America. At a minimum, then, standardized tests would seem to offer an approximate measure of this aspect of educational performance.

It should also be emphasized that test scores take no account of the difficulty of the educational task facing each school. Some schools may do an excellent job of educating students from minority backgrounds. Other schools may be blessed with students who have family support and economic advantages that almost guarantee they will

learn rapidly, as measured by standardized achievement tests. The results of standardized achievement tests may show schools of the former type achieving scores well below schools in the latter category. Yet, educationally, the quality of educational performance could be the opposite; the school with the lower scores could actually be doing the best teaching job. In short, assessments of school performance must take account of the starting points of students, as well as where they end up.

BIA schools have many students who enter school already well behind their peers in the typical American school. Indeed, many entering BIA students--by some estimates roughly 30 percent--do not speak English as a primary language. They also come in disproportionate numbers from families that have low incomes, unemployment, alcoholism and other social problems. In 1987, 31 percent of elementary and secondary students in BIA-funded schools lived away from home at boarding schools, where they received less exposure outside the classroom to adult conversation and attention. BIA students generally face a more difficult task than other students in that they must seek to blend and understand two different cultures. For all these reasons, the test scores of the students in BIA schools are not in themselves a full measure of the educational performance of the schools.

There are some ways, however, in which it may be fair to draw some conclusions about the educational performance of BIA schools. For example, if two BIA schools accept students from similar backgrounds and degrees of social advantage, and students in one school learn much more than students in the other, it may well be reasonable to draw the conclusion that the first school is achieving an educational performance superior to the second. The results of testing may also show that students in some schools are achieving levels of learning far below their peers nationwide. Given the staffing and resources available, the school may be doing as well as could reasonably be expected of it. One may still conclude, however, that the school is performing at an unacceptably low level and that whole new approaches-- perhaps involving greater resources--may be required.

Until recently, there was no systematic testing of students in BIA schools Bureauwide. However, reflecting a policy decision made in 1985, all BIA-operated schools--and contract schools as well--are now directed to administer a standard national test to their students. Such tests were first administered throughout the system in the 1985-1986 school year--although the majority of schools had already begun some form of testing earlier. Tests were also given throughout the BIA system for the 1986-1987 school year, but the results were not available in computerized form in time for presentation in this Final Review Draft. However, the Final Report, to follow this Final Review Draft, will incorporate the test data for 1986-1987, replacing the 1985-1986 test scores presented in this draft.

Each BIA-funded school is directed to administer one of two tests, the California Achievement Test (CAT-E/F) or the Comprehensive Test of Basic Skills (CTBS-U/V). The CAT and CTBS are normed by McGraw-Hill and are used widely to test students throughout the United States. BIA students, beginning in grade 2, are tested

every year for knowledge of reading, language, mathematics and other subjects. A composite or "battery" test score gives a single measure of the overall student level of knowledge in all subject areas. In the spring of 1986, a total of 23,218 students in BIA-funded schools took the tests and received battery test scores that were centrally scored by McGraw-Hill. Of the total, 4,901 students were in contract schools and 18,317 in BIA-operated schools. The tests used were divided about equally between the CTBS and CAT--11,647 of the former and 11,571 of the latter. The largest number of test takers, 2,909, was in grade 3 and the smallest, 1,112, in grade 12. The smaller number in grade 12 reflected dropouts from school altogether and the common practice for BIA students to transfer to public schools, especially following grade 8.

In 1986, the BIA reported enrollment of 38,475 students in BIA-funded schools. Thus, only about 60 percent of students took the national tests. This percentage reflects the absence of testing for kindergarten and first grade (although some tests are given to first graders); dropouts from school between "count week" and the testing date; failure to be tested due to illness and other excused absence; decisions of some BIA schools not to send test data to McGraw-Hill; resistance of some contract schools to giving the tests; and other factors.

Test results are shown in this chapter in two ways, as a "percentile ranking" and in terms of a "grade equivalent." The percentile ranking shows how the test taker compared with other students nationwide in the same grade and taking the same test at that time. Thus, a percentile ranking of 75 would indicate that the student scored as high or higher on the test than 75 percent of all the students nationwide taking the test and below the remaining 25 percent of still higher scoring students. The lowest possible score would be a percentile ranking of 1--indicating that 99 percent of test takers nationwide scored higher. The highest possible score would be a percentile ranking of 99-- indicating that the student scored higher than all but 1 percent of the test takers nationwide.

The "grade equivalent" shows the grade level in school for which the test score would represent the expected or average result nationwide. Thus, if a student in the fourth grade received a grade equivalent of 5.5, it would show that the fourth-grader's test score would normally be expected of a student in the middle of the fifth grade taking the same test. A test score by the same fourth grader of 3.5 would indicate a score normally expected of a student in the middle of the third grade on the same test.

Since the tests were administered in the spring of the 1985-1986 school year, a student keeping pace with his or her grade level nationwide should have made substantial progress toward the next grade. For example, BIA fourth-grade classes should achieve a test result showing a grade equivalent of 4.7, if they are keeping up with the typical rate of learning of other fourth graders nationwide. A grade equivalent of 3.7 would show that BIA fourth graders were one full school year behind the national averages for their grade.

In presenting test results for all BIA-funded schools, or for some of the larger regions, it simplified the presentation to average together percentile rankings and grade equivalents obtained separately from CAT and CTBS tests. This was done by first calculating the average "scale score" for all students taking the CTBS in a given region, and then separately for all students taking the CAT in the region. These figures were then converted into percentile rankings or grade equivalents corresponding to the average raw test score of all regional CTBS or CAT test takers. The separate results of the CTBS and CAT were then merged into a single percentile ranking or grade equivalent by using a weighted average, the weights derived from the absolute number of CTBS and CAT test takers.

Taking the weighted average of separate tests is not a standard test reporting procedure. However, in the great majority of cases, the percentile rankings and grade equivalents for the two tests were very similar in the same region--within a few percentage points of one another, for example, in percentile rankings. Hence, very little would be gained by a separate reporting of CTBS and CAT results; yet such a presentation would be more cumbersome and difficult to follow.

Many BIA-funded schools include special education students--who possess mental and physical handicaps of various sorts--in their regular standardized testing program. Thus, the test results sent to McGrall-Hill for 1985-1986 scoring included special education students from some BIA-funded schools. Public schools in the United States, however, typically exclude special education students in their reporting of their students' standardized test scores. Accordingly, the test score results presented below for BIA-funded schools are not directly comparable to test results for public schools. This problem will be resolved in the Final Report, because the 1986-1987 test results will be reported there. The revised 1986-1987 policy of BIA-funded schools for student testing excludes the test results of special education students from test score reporting of regular students.

Because systemwide testing began only in 1985-86, and critical procedures for inclusion of special education students were charged for 1986-87, it will be impossible to demonstrate any systemwide time trends until the test results for the 1987-88 test year are received. The data included in this chapter are limited in that they show test results for only one point in time. Many individual schools and Agencies have been testing for longer periods and can show changes in student test results over time. In some cases these results are promising in that test scores, even while low, are showing significant upward movement.

Systemwide Results for BIA Schools

The test scores of both BIA-operated and contract schools show that their students are falling well behind the mean of other students nationwide in their ability to demonstrate learning of reading, language, and mathematics. Table 1 shows for each grade the percentile ranking for the average battery test score achieved by students in BIA-operated schools, students in contract schools, and students in all schools

TABLE 1

PERCENTILE RANKINGS FOR 1986 TEST SCORES, BY GRADE AND TYPE OF SCHOOL BATTERY OF TESTS (Number of Test Takers in Parentheses)

Type of School	Grade 1	2	3	4	5	6	7	8	9	10	11	12
BIA-Oper. Schools	N/A	22% (2,256)	22% (2,441)	22% (2,412)	20% (2,068)	22% (2,045)	22% (1,796)	20% (1,693)	16% (1,037)	16% (947)	20% (819)	21% (803)
Contract Schools	N/A	18 (433)	16 (468)	19 (441)	18 (393)	17 (412)	19 (537)	18 (491)	16 (573)	16 (491)	17 (353)	20 (309)
All BIA-Funded Schools	N/A	22 (2,689)	21 (2,909)	21 (2,853)	19 (2,461)	21 (2,457)	21 (2,333)	19 (2,184)	16 (1,610)	16 (1,438)	18 (1,172)	21 (1,112)

(BIA and contract) together. The figures shown in parentheses below the percentile rankings in Table 1 (and all subsequent tables in this chapter) indicate the total number of test takers for that type of school and grade.

As seen in Table 1, the highest systemwide percentile ranking of any grade in BIA-operated schools was the 22nd percentile, a ranking which was achieved by several grades. For students in BIA-operated schools from grade 2 to grade 8, the percentile rankings varied only between 20 and 22. For students in BIA-operated schools from grade 9 to grade 12, and for contract schools at all grade levels, the typical test result was a percentile ranking between the 16th and the 20th percentiles. Contract schools generally achieved test scores in 1986 similar to, but in most cases a few percentage points below, BIA-operated schools. For all grades, the contract schools were, on average, 2.5 percentage points below the BIA-operated schools. Such differences may reflect different backgrounds and educational disadvantages of students in contract schools, rather than any differences in the quality of educational programs. Indeed, it is possible that contract schools could be doing a superior educational job, even though test scores are slightly lower.

There is a common belief that test scores of disadvantaged minority students decline over time, as students progress upward through grade levels. However, using percentile rankings as a way of assessing test scores, there is little evidence for this view in the test results for BIA-operated and contract schools. The average scores for both second and third graders in BIA-operated schools represented a percentile ranking of 22; the percentile rankings for seventh and eighth graders were 22 and 20, respectively. A significant drop in test scores does occur from eighth to ninth grade. However, this drop occurs along with a sharp decline in the BIA population of test takers, from 1,693 test takers in the eighth grade to 1,037 test takers in the ninth grade. The decline in BIA scores for the ninth and other high school grades probably reflects

the retention in BIA-operated high schools of students with greater educational disadvantages who may already have had lower test scores in earlier grades.

Once entered in high school, BIA percentile rankings rise a few percentages from 9th grade to 12th grade. Here again, this rise may reflect a tendency of poorer students to drop out, rather than improved educational performance for a given body of students. The test scores for contract schools also show a relative stability from second grade through eighth grade, a drop in ninth grade and then some limited rises in scores by the twelfth grade.

Percentile rankings on reading tests are shown in Table 2 and on language tests in Table 3. Generally, the results are similar to those shown in Table 1 for the full bat-

TABLE 2

PERCENTILE RANKINGS FOR 1986 TEST SCORES, BY GRADE AND TYPE OF SCHOOL READING (Number of Test Takers in Parentheses)

Type of School	Grade 1	2	3	4	5	6	7	8	9	10	11	12
BIA-Oper. Schools	25% (2,626)	20% (2,653)	20% (2,546)	22% (2,414)	19% (2,077)	19% (2,054)	19% (1,805)	17% (1,707)	14% (1,069)	14% (960)	17% (827)	17% (815)
Contract Schools	18 (549)	18 (449)	18 (473)	23 (446)	21 (397)	19 (413)	22 (544)	17 (493)	18 (584)	18 (503)	20 (367)	23 (321)
All BIA-Funded Schools	23 (3,175)	20 (3,102)	20 (3,019)	22 (2,860)	19 (2,474)	19 (2,467)	20 (2,349)	17 (2,200)	16 (1,653)	16 (1,463)	17 (1,194)	18 (1,112)

TABLE 3

PERCENTILE RANKINGS FOR 1986 TEST SCORES, BY GRADE AND TYPE OF SCHOOL LANGUAGE (Number of Test Takers in Parentheses)

Type of School	Grade 1	2	3	4	5	6	7	8	9	10	11	12
BIA-Oper. Schools	N/A	23% (2,260)	17% (2,444)	22% (2,413)	22% (2,072)	25% (2,058)	28% (1,802)	26% (1,699)	20% (1,052)	20% (955)	23% (827)	24% (813)
Contract Schools	N/A	17 (434)	21 (472)	21 (441)	19 (394)	19 (413)	23 (540)	20 (492)	17 (582)	19 (500)	19 (359)	22 (316)
All Schools	N/A	22 (2,694)	17 (2,916)	22 (2,854)	21 (2,466)	23 (2,471)	26 (2,342)	24 (2,191)	19 (1,634)	20 (1,455)	21 (1,186)	24 (1,129)

tery of tests. Relative to BIA-operated schools, contract schools did slightly better on the reading tests, achieving percentile rankings on average a percentage point higher. However, BIA-operated schools did somewhat better on the language tests, as shown in Table 3. The language test includes measures of knowledge in spelling, grammar, punctuation, vocabulary and other skills needed for writing.

The percentile rankings on the mathematics test, shown in Table 4, exhibit greater variability from grade to grade than the rankings for the other tests. Students in BIA-operated schools in the 1st, 2nd and 3rd grades achieved the highest percentile rankings of any grades. Unlike the other tests, the mathematics test scores for BIA-operated schools show a tendency for student relative performance to decline as students advance to higher grades in school. First-grade students in BIA-operated schools achieved mathematics scores in 1986 in the 41st percentile. First graders in contract schools achieved a percentile ranking of 34. Although many students enter BIA-operated and contract schools speaking primarily their tribal language, this is less of a disadvantage for mathematics. By the eighth grade, however, the mathematics test scores for BIA-operated schools and contract schools show a decline to the 22nd and 19th percentiles, respectively.

TABLE 4

PERCENTILE RANKINGS FOR 1986 TEST SCORES, BY GRADE AND TYPE OF SCHOOL
MATHEMATICS (Number of Test Takers in Parentheses)

Type of School	Grade 1	2	3	4	5	6	7	8	9	10	11	12
BIA-Oper. Schools	41% (2,198)	35% (2,574)	30% (2,547)	26% (2,417)	26% (2,072)	23% (2,057)	24% (1,804)	22% (1,702)	17% (1,048)	19% (963)	21% (834)	22% (817)
Contract Schools	34 (522)	22 (445)	16 (473)	19 (444)	17 (395)	17 (413)	19 (542)	19 (495)	16 (591)	17 (501)	19 (364)	21 (324)
All BIA-Funded Schools	40 (2,720)	28 (3,019)	23 (3,020)	25 (2,861)	24 (2,467)	22 (2,470)	23 (2,346)	21 (2,197)	16 (1,639)	19 (1,464)	20 (1,198)	22 (1,141)

Table 5 is based on the same raw test scores as Table 1. However, instead of showing the results of the tests as a percentile ranking, the test scores are now converted into a grade equivalent. As Table 5 shows, BIA-operated schools start off already well behind in the second grade. A grade equivalent of 2.7 is the national norm for second grade when the tests are taken in the spring. However, a grade equivalent of 2.2 was actually achieved by BIA second graders. Thus, in the first two years BIA students had already fallen five months behind. Students in BIA-operated schools then

TABLE 5

GRADE EQUIVALENTS FOR 1986 TEST SCORES, BY GRADE AND TYPE OF SCHOOL BATTERY OF TESTS (Number of Test Takers in Parentheses)

Type of School	Grade 1	2	3	4	5	6	7	8	9	10	11	12
BIA-Oper. Schools	N/A	2.2 (2,256)	2.7 (2,441)	3.5 (2,412)	4.1 (2,068)	4.8 (2,045)	5.2 (1,796)	5.8 (1,693)	6.3 (1,037)	7.0 (947)	7.8 (819)	8.2 (803)
Contract Schools	N/A	2.2 (433)	2.6 (468)	3.1 (441)	3.7 (393)	4.3 (412)	5.0 (537)	5.7 (491)	6.3 (573)	7.0 (353)	7.3 (491)	7.9 (309)
All BIA-Funded Schools	N/A	2.2 (2,689)	2.7 (2,909)	3.4 (2,853)	4.0 (2,461)	4.7 (2,457)	5.2 (2,333)	5.8 (2,184)	6.3 (1,610)	7.0 (1,438)	7.7 (1,172)	8.1 (1,112)

fall steadily further behind as they move to higher grades. By eighth grade, the average BIA student exhibits a grade equivalent of 5.8, compared with the 8.7 grade equivalent that is the national average for eighth graders in the spring test period. The average BIA student thus by the end of the eighth grade is almost three years behind the mean of other students nationwide.

The test scores shown in Table 5 may seem to suggest that the performance of BIA students gets worse at each succeeding grade level, compared with their student peers nationwide. However, as was shown in Table 1, the percentile rankings of students in BIA-operated schools actually change little from the second to the eighth grade, falling in every case from the 20th to the 22nd percentiles of all students taking the tests nationwide. The figures in Table 5 do reflect the fact that a ranking in the 20th or 22nd percentile represents a growing absolute deficiency in demonstrated knowledge relative to the level of knowledge shown on the test by an average student for that grade level. In this sense, the view that BIA students fall further and further behind as they move through school has some validity.

Tables 6, 7 and 8 show the grade equivalents achieved by students in BIA-operated and contract schools for the specific tests in reading, language and mathematics. Generally, the test results show patterns similar to those shown in Tables 2, 3 and 4 for percentile rankings. The BIA-operated schools on the whole do a little bit better than contract schools. For example, eighth graders in BIA-operated schools achieved a grade equivalent of 7.0 in mathematics, compared with a grade equivalent of 6.3 for eighth graders in contract schools. Mathematics was also the area in which eighth grade students in BIA-operated and contract schools come closest to their actual grade level--perhaps partly reflecting the language difficulties of many Indian students. The combined eighth-grade students in BIA-operated and contract schools scored at grade equivalents for reading and language of 5.9 and 5.2, respectively, compared with a 6.8 grade equivalent in mathematics for eighth graders.

TABLE 6

GRADE EQUIVALENTS FOR 1986 TEST SCORES, BY GRADE AND TYPE OF SCHOOL
READING (Number of Test Takers in Parentheses)

Type of School	Grade 1	2	3	4	5	6	7	8	9	10	11	12
BIA-Oper. Schools	1.4 (2,626)	2.1 (2,653)	2.5 (2,546)	3.1 (2,414)	3.7 (2,077)	4.6 (2,054)	5.1 (1,805)	5.8 (1,707)	6.4 (1,069)	7.1 (827)	8.0 (815)	8.5 (96)
Contract Schools	1.4 (549)	2.1 (449)	2.5 (473)	3.1 (446)	3.8 (397)	4.5 (413)	5.4 (544)	6.2 (493)	6.9 (584)	7.6 (503)	8.1 (367)	8.8 (321)
All BIA-Funded Schools	1.4 (3,175)	2.1 (3,102)	2.5 (3,019)	3.1 (2,860)	3.8 (2,474)	4.6 (2,467)	5.2 (2,349)	5.9 (2,200)	6.7 (1,653)	7.3 (1,463)	8.0 (1,194)	8.6 (1,136)

TABLE 7

GRADE EQUIVALENTS FOR 1986 TEST SCORES, BY GRADE AND TYPE OF SCHOOL
LANGUAGE (Number of Test Takers in Parentheses)

Type of School	Grade 1	2	3	4	5	6	7	8	9	10	11	12
BIA-Oper. Schools	N/A	2.2 (2,260)	2.5 (2,444)	3.3 (2,413)	3.9 (2,072)	4.4 (2,058)	4.7 (1,802)	5.3 (1,699)	5.2 (1,052)	5.8 (955)	7.0 (827)	7.6 (813)
Contract Schools	N/A	2.1 (434)	2.5 (472)	2.8 (441)	3.3 (394)	3.6 (413)	3.8 (540)	4.9 (492)	4.7 (582)	5.5 (500)	5.5 (359)	6.5 (316)
All BIA-Funded Schools	N/A	2.1 (2,694)	2.5 (2,916)	3.3 (2,854)	3.8 (2,466)	4.2 (2,471)	4.5 (2,342)	5.2 (2,191)	4.9 (1,634)	5.7 (1,455)	6.5 (1,186)	7.2 (1,129)

TABLE 8

GRADE EQUIVALENTS FOR 1986 TEST SCORES, BY GRADE AND TYPE OF SCHOOL
MATHEMATICS (Number of Test Takers in Parentheses)

Type of School	Grade 1	2	3	4	5	6	7	8	9	10	11	12
BIA-Oper. Schools	1.6 (2,198)	2.4 (2,574)	3.1 (2,547)	3.9 (2,417)	4.7 (2,072)	5.3 (2,057)	6.1 (1,804)	7.0 (1,702)	7.2 (1,048)	7.8 (963)	8.1 (834)	8.1 (817)
Contract Schools	1.6 (522)	2.3 (445)	2.8 (473)	3.4 (444)	4.2 (395)	4.7 (413)	5.6 (542)	6.3 (495)	7.0 (591)	7.4 (501)	7.6 (364)	7.8 (324)
All BIA-Funded Schools	1.6 (2,720)	2.3 (3,019)	3.1 (3,020)	3.8 (2,861)	4.6 (2,467)	5.2 (2,470)	6.1 (2,346)	6.8 (2,197)	7.1 (1,639)	7.7 (1,464)	7.9 (1,198)	8.0 (1,141)

Test Scores by Type of School and Residency

For a number of years the policy of the BIA has been to encourage day schools and to limit or reduce the number of boarding schools. Day schools allow the student to live in a home environment, where there may be greater interaction with and learning from adults. Living at home involves the parents in education. They may be able to encourage students to stay in school and may help in shaping good work and study habits. Involved parents are a key to involvement of the whole community in education and to the development of a strong tribal commitment to successful schools.

There remain some Indian children, however, who may be better off in boarding schools. Some students have a home environment that would hinder more than help the education of the student. Proper space to study as well as peace and quiet may be missing in some homes. Boarding schools may offer superior nutrition and closer supervision than some students would receive at home. Boarding schools are also necessary for some students who live at such isolated locations that daily trips to and from school would be infeasible. In 1987, 31 percent of BIA-operated and contract school students were boarding students.

Table 9 shows the percentile rankings for the full battery of tests for day and boarding schools (which also include many students who attend on a day basis). In terms of measurable educational achievement, there is little difference through the eighth grade in test scores for BIA-operated day and BIA-operated reservation boarding schools. However, test scores drop sharply for BIA-operated reservation boarding schools for grades 9 and 10, especially compared with a rise in test scores for BIA-operated day schools in these same grades. Scores of students in BIA-operated reservation boarding schools then rise somewhat for grades 11 and 12.

The sharp drop from grade 8 to grade 9 in percentile rankings of BIA-operated reservation boarding schools may partly reflect a decline in the quality of education offered by these BIA-operated schools. However, a more important factor may be a shift in the composition of BIA students from grade 8 to grade 9. Following grade 8, many of the better students of BIA-operated schools graduate and go on to public schools. As shown in Table 9, the total number of test takers in BIA-operated reservation schools (day and boarding) dropped from 1,570 students in eighth grade to 686 students in ninth grade. An above-average number of the students who attend BIA-operated boarding schools from ninth through twelfth grades have disciplinary, learning, and other problems. Some may have been dismissed from public schools and attend BIA-operated boarding high schools as the school of last resort.

Off-reservation boarding schools (four BIA-operated and one contract reported test scores of the seven off-reservation schools) show test results similar to reservation boarding schools, including a drop from grade 8 to grade 9. Until grade 9, there are few test takers in off-reservation boarding schools--only 40 in grade 4--so the percentile rankings for the earlier grades have limited significance.

TABLE 9

PERCENTILE RANKINGS FOR 1986 TEST SCORES, BY GRADE, SCHOOL TYPE & RESIDENCY BATTERY OF TESTS (Number of Test Takers in Parentheses)

Type of School & Residency	Grade 1	2	3	4	5	6	7	8	9	10	11	12
BIA-Op. Day Schs.	N/A	22% (1,021)	20% (1,063)	22% (963)	22% (795)	24% (834)	24% (544)	21% (547)	31% (165)	25% (147)	30% (115)	28% (97)
BIA-Op. Reserv. Boarding	N/A	23 (1,207)	24 (1,356)	22 (1,409)	19 (1,220)	20 (1,135)	22 (1,132)	20 (1,023)	13 (521)	13 (425)	17 (371)	21 (369)
Contract Day	N/A	18 (349)	19 (359)	20 (353)	19 (295)	18 (301)	19 (388)	18 (324)	16 (424)	17 (367)	18 (266)	23 (217)
Contract Reservation Boarding	N/A	11 (84)	9 (109)	16 (88)	14 (98)	13 (111)	20 (149)	16 (167)	13 (113)	16 (86)	13 (62)	19 (69)
Off-Res.Boarding	N/A	19 (28)	10 (22)	18 (40)	20 (53)	22 (76)	24 (120)	19 (123)	15 (387)	17 (413)	19 (358)	20 (360)

As seen in Table 9, the percentile rankings in contract day schools for grade 1 to grade 8 are typically a few percentages points below the rankings for the same grades in BIA-operated day schools. For example, the average percentile ranking of a seventh grader in a BIA-operated day school was 24, compared with a percentile ranking of 19 for a seventh grader in a contract day school. For grade 9 to grade 12, the overall percentile rankings of BIA-operated day schools exceeded that of contract schools by a greater margin.

Contract day schools had higher test scores than contract reservation boarding schools. For example, as shown in Table 9, the fifth graders in contract day schools achieved a percentile ranking of 19, compared with a percentile ranking of 14 for contract reservation boarding schools. For grade 9 through grade 12, the contract day schools also had higher test scores than contract reservation boarding schools.

Table 10 is based on the same raw test scores as Table 9, but in this case the results are shown as grade equivalents. The same patterns and tendencies discussed with respect to Table 9 are also evident in the grade equivalents shown in Table 10. At the end of eighth grade, students in BIA-operated day (6.2 grade equivalent), BIA-operated reservation boarding (5.7), contract day (5.8), contract reservation boarding (5.5), and off-reservation boarding schools (6.0) are all substantially behind their peers. By the end of twelfth grade, they have fallen still further behind. Twelfth graders achieved grade equivalents of 8.5 in BIA-operated day schools, 8.5 in BIA-

TABLE 10

GRADE EQUIVALENTS FOR 1986 TEST SCORES, BY GRADE, SCHOOL TYPE & RESIDENCY BATTERY OF TESTS (Number of Test Takers in Parentheses)

Type of School & Residency	Grade 1	2	3	4	5	6	7	8	9	10	11	12
BIA-Op. Day Schs.	N/A	2.3 (1,021)	2.7 (1,063)	3.4 (963)	4.0 (795)	5.0 (834)	5.4 (544)	6.2 (547)	8.0 (165)	8.2 (147)	8.7 (115)	8.5 (97)
BIA-Op. Reserv. Boarding	N/A	2.2 (1,207)	2.8 (1,356)	3.5 (1,409)	4.1 (1,220)	4.6 (1,135)	5.0 (1,132)	5.7 (1,023)	5.8 (521)	6.7 (425)	7.6 (371)	8.5 (369)
Contract Day	N/A	2.2 (349)	2.7 (359)	3.1 (353)	3.8 (295)	4.5 (301)	5.5 (388)	5.8 (324)	6.3 (424)	7.1 (367)	7.5 (266)	8.1 (217)
Contract Reservation Boarding	N/A	2.0 (84)	2.3 (109)	3.0 (88)	3.7 (98)	4.0 (111)	5.0 (149)	5.5 (167)	6.0 (113)	6.9 (86)	6.7 (62)	7.8 (69)
Off-Res.Boarding	N/A	2.1 (28)	2.3 (22)	3.8 (40)	4.2 (53)	4.8 (76)	5.4 (120)	6.0 (123)	6.1 (387)	6.9 (413)	7.5 (358)	7.8 (360)

operated reservation boarding schools, 8.1 in contract day schools, 7.8 in contract reservation boarding schools and 7.8 in off-reservation boarding schools.

Among educators there has been considerable debate concerning the impact of school size on learning success. Small schools may offer a stronger sense of community, greater involvement of parents, and more attention of teachers and school leadership to individual students. However, small schools may not be able to offer specialized instruction, retain curriculum and other specialists at the school, and generally benefit from the efficiencies of a larger school size. A larger student body may offer greater diversity and competition among students, creating a greater interest in learning. If strong leadership is in short supply, a few larger schools may be more likely to obtain principals with such leadership qualities.

In order to shed some light on these issues, all BIA-operated and contract schools were grouped into four categories: less than 100 students; from 100 to 250 students; from 251 to 500 students; and more than 500 students. As shown in Table 11, there is no strong relationship between the size of a school and the percentile rankings achieved by students in these schools. However, for grade 2 through grade 8, the percentile rankings do offer some evidence that larger schools work better than smaller schools. For example, in grade 6, schools with less than 100 students achieved a percentile ranking of 18; schools with 100 to 250 students also a ranking of 18; schools with 251 to 500 students a ranking of 20; and schools with more than 500 students a percentile ranking of 24. Schools with more than 500 students achieved percentile rankings of 30, 29 and 28 in grades 2 through 4, compared with percentile rankings of 21, 19, and 17 for the same grades in schools with less than 100 students.

TABLE 11

PERCENTILE RANKINGS FOR 1986 TEST SCORES, BY GRADE AND SIZE OF SCHOOL BATTERY OF TESTS (Number of Test Takers in Parentheses)

Size of School	Grade 1	2	3	4	5	6	7	8	9	10	11	12
Less than 100 students	N/A	21% (250)	19% (207)	17% (196)	17% (151)	18% (170)	13% (113)	14% (154)	14% (101)	20% (73)	21% (62)	22% (59)
100-250 students	N/A	18 (794)	18 (835)	21 (808)	20 (666)	18 (574)	23 (450)	20 (405)	18 (137)	18 (112)	19 (75)	20 (74)
251-500 students	N/A	19 (898)	18 (1,110)	19 (1,096)	18 (1,012)	20 (965)	20 (903)	20 (856)	18 (466)	18 (411)	22 (312)	21 (266)
500+ students	N/A	30 (747)	29 (757)	28 (753)	22 (632)	24 (748)	24 (867)	20 (769)	18 (906)	15 (842)	18 (723)	21 (713)

For grade 9 through grade 12, there is no apparent relationship between school size and student test scores. If anything, in the higher grades smaller schools may do slightly better than larger schools. In grade 10, for example, schools with more than 500 students achieved a percentile ranking of 15, compared with a percentile ranking of 20 for schools with less than 100 students.

It should be emphasized that it is difficult to draw any firm conclusions from the evidence of such test scores alone. For example, perhaps merely by coincidence, larger schools might be found in areas where the students have greater educational advantages. If these schools and grades then showed higher test scores, it would be incorrect to draw a conclusion that large school size explained the higher scores observed.

Another important educational issue is whether student learning is significantly affected by the student-teacher ratios found in a school. Clearly, at some size of classroom student learning would be adversely affected. However, within a range of perhaps 10 students to 30 students per teacher, it is possible that there may not be much impact on student learning.

In order to examine this issue, all BIA-operated and contract schools for which student-teacher ratios (as reported by the schools themselves) were available were grouped into four categories: schools with student-teacher ratios of 15.0 or less; schools with ratios of 15.1 through 20.0; schools with ratios of 20.1 through 25.0; and schools with student-teacher ratios of 25.1 and above. Table 12 shows the percentile rankings for students in each of these categories. Because student-teacher ratios were not available for some schools, the number of test takers shown in the categories of Table 12 is well below the total number of test takers shown in previous tables. In particular, because many of the high schools containing grades 9 through 12 are not

TABLE 12

PERCENTILE RANKINGS FOR 1986 TEST SCORES, BY GRADE AND STUDENT-TEACHER RATIO BATTERY OF TESTS (Number of Test Takers in Parentheses)

Student-Teacher Ratio of School	Grade 1	2	3	4	5	6	7	8	9	10	11	12
15 or less	N/A	23% (202)	22% (181)	25% (256)	24% (235)	26% (263)	21% (201)	20% (206)	16% (150)	15% (149)	21% (122)	22% (139)
15.1 - 20.0	N/A	23 (714)	22 (721)	22 (450)	20 (324)	24 (317)	21 (193)	17 (214)	17 (220)	19 (237)	21 (198)	19 (196)
21.1 - 25.0	N/A	23 (1,062)	22 (1,225)	24 (1,011)	21 (934)	23 (886)	23 (946)	21 (867)	25 (109)	30 (66)	30 (55)	39 (35)
25.1 +	N/A	17 (125)	15 (170)	17 (512)	19 (449)	19 (465)	19 (344)	18 (317)	15 (73)	21 (48)	17 (38)	19 (27)

included in this table, the percentile rankings shown for these grades do not include sufficient test takers to have much significance.

For grade 2 through grade 8, as shown in Table 12, there is some small suggestion that lower student-teacher ratios can improve student test scores. For most grades, the schools that have student-teacher ratios of 15 or less also have higher test scores. For example, fifth graders in those schools with a student-teacher ratio of 15.0 or less achieved a percentile ranking of 24. By comparison, fifth graders in schools with a student-teacher ratio in the ranges of 15.1 to 20.0, of 20.1 to 25.0, and of 25.1 and above achieved percentile rankings of 20, 21, and 19, respectively. Such evidence is hardly conclusive, but offers some small indications that may bear further investigation.

Test Scores by State and Region

As examined in Chapter II, four states--Arizona, New Mexico, North Dakota and South Dakota--contain 83 percent of all the students in the BIA-funded school system. Table 13 shows the battery percentile ranking for students of BIA-operated and contract schools in the state that contains the largest number of students in this system, Arizona. The federally funded Indian schools in Arizona are divided into two regional categories, the Navajo Reservation and "other Arizona."

Both the BIA-operated and contract schools in Arizona are somewhat below the average scores for the BIA-operated and contract system as a whole (see Table 1). For example, fourth graders in BIA-operated Navajo schools in Arizona achieved a percentile ranking on the battery test of 18. Fourth graders in contract Navajo schools

TABLE 13

ARIZONA PERCENTILE RANKINGS FOR TEST SCORES, BY GRADE, REGION & SCHOOL TYPE BATTERY OF TESTS (Number of Test Takers in Parentheses)

Arizona Region/ Type of School	Grade 1	2	3	4	5	6	7	8	9	10	11	12
Navajo BIA-Op.	N/A	25% (548)	23% (762)	18% (810)	16% (658)	16% (605)	22% (647)	20% (522)	11% (91)	10% (103)	15% (105)	22% (117)
Navajo Contract	N/A	12 (30)	5 (29)	13 (29)	11 (31)	12 (25)	20 (58)	20 (56)	15 (70)	13 (59)	13 (29)	16 (31)
All Navajo BIA-funded	N/A	24 (578)	23 (791)	17 (839)	16 (689)	16 (630)	22 (705)	20 (578)	12 (161)	11 (162)	14 (134)	21 (148)
Other Ariz. BIA-Op.	N/A	14 (244)	16 (246)	21 (216)	17 (188)	19 (194)	20 (166)	20 (174)	14 (107)	13 (82)	22 (74)	23 (92)
Other Arizona Contract	N/A	9 (34)	15 (21)	12 (27)	18 (18)	14 (24)	15 (27)	11 (41)	N/A	N/A	N/A	N/A
All Other Arizona BIA-Funded	N/A	14 (278)	16 (267)	19 (243)	17 (206)	18 (218)	19 (193)	19 (215)	14 (107)	13 (92)	22 (74)	23 (92)
Total Arizona BIA-Op.	N/A	21 (822)	21 (1,088)	19 (1,026)	16 (846)	17 (799)	22 (813)	20 (696)	13 (198)	11 (195)	18 (179)	22 (209)
Total Arizona Contract	N/A	10 (64)	9 (50)	13 (56)	14 (49)	13 (49)	18 (85)	16 (97)	15 (70)	13 (59)	13 (29)	16 (31)
All Arizona BIA-Funded	N/A	21 (856)	21 (1,058)	17 (1,082)	16 (895)	17 (848)	21 (898)	20 (793)	13 (268)	12 (254)	17 (208)	22 (240)

in Arizona achieved a percentile ranking of 13. In parts of Arizona other than the Navajo Reservation, fourth graders in BIA-operated and contract schools achieved percentile rankings of 21 and 12, respectively. These Arizona scores compare with percentile rankings for fourth graders in BIA-operated and contract schools nationwide of 22 and 18, respectively.

Table 14 shows comparisons of percentile rankings for BIA-funded schools in Arizona with percentile rankings for Indian students in public schools in Arizona. Although the tests were taken at the same time (spring 1986), the Arizona public schools did not use the same tests as BIA-funded schools in Arizona, so the results are not directly comparable in this regard. Moreover, special education students are generally excluded from reports of public school test scores, while BIA test scores for 1985-1986 include special education students for some schools. Nevertheless, recognizing

TABLE 14

COMPARISONS OF PERCENTILE RANKINGS OF ARIZONA INDIAN STUDENTS, PUBLIC SCHOOLS WITH BIA AND CONTRACT SCHOOLS[1]

(Number of Test Takers in Parentheses)

Indian Students in Arizona	Reading Percentile Ranking			Language Percentile Ranking			Mathematics Percentile Ranking		
	Grade								
Public Schools	4	8	11	4	8	11	4	8	11
Navajo-Speaking	22% (714)	16% (544)	16% (593)	28% (711)	22% (536)	26% (596)	18% (709)	23% (540)	28% (591)
All Arizona Indian	29 (2,497)	24 (2,373)	22 (1,972)	35 (2,482)	29 (2,345)	33 (1,975)	22 (2,479)	29 (2,355)	32 (1,974)
Arizona BIA and Contract Schools	4	8	11	4	8	11	4	8	11
Navajo Reservation BIA-Funded	16 (842)	13 (582)	9 (135)	18 (840)	29 (579)	18 (134)	24 (842)	23 (582)	26 (137)
Other Arizona BIA-Funded	20 (243)	15 (216)	16 (75)	22 (243)	23 (216)	30 (74)	18 (243)	20 (215)	21 (74)
All Arizona BIA-Funded	17 (1,085)	14 (798)	12 (210)	19 (1,083)	27 (795))	22 (208)	23 (1,085)	22 (797)	24 (211)

[1]Percentile Rankings for Arizona Public Schools based on Iowa tests of Basic Skills (Grades 4, 8) and Stanford Test of Academic Skills (Grade 11). Percentile Rankings for BIA and Contract Schools based on CTBS (Navajo Reservation) and CAT (other Arizona).

these qualifications, comparisons may still be of interest on a percentile basis. Overall, as Table 14 shows, Indian children attending public schools in Arizona achieved somewhat higher percentile rankings than Indian children attending BIA-funded schools. For example, statewide, the average reading score for eighth-grade Indian students in public schools was in the 24th percentile, compared with a percentile ranking for reading in the 14th percentile for eighth graders in BIA-funded schools in Arizona.

When limited to Navajo-speaking (primarily or exclusively) children, the percentile rankings achieved in Arizona public schools come closer to the percentile rankings of children in BIA-funded schools on the Navajo Reservation. For example, fourth grade children in Arizona public schools who are Navajo-speaking achieved a 1986 percentile ranking on the reading test of 22. Fourth graders in BIA-funded schools

on the Arizona portions of the Navajo Reservation achieved a percentile ranking on the reading test of 16.

Such comparisons are further complicated because not all students from Navajo families would necessarily be classed as primarily Navajo-speaking (they may speak primarily English). Hence, if primarily English speaking students from Navajo families score higher, public schools on the Navajo Reservation may achieve higher test scores for their Indian students as a whole than the results shown for Navajo-speaking students in Table 14.

Nevertheless, the best basis for comparison of the educational performance of BIA-operated and contract schools may be with the Navajo-speaking segment of the public school population. The BIA-funded schools have significant proportions of students who would be classified as primarily or exclusively Navajo-speaking. BIA-funded schools are also more likely to have students from isolated areas who have had less exposure to mainstream culture. All in all, because of such complications, it is difficult to draw any definitive conclusions from the test scores in Table 14.

The percentile rankings on the full battery of tests are shown in Table 15 for Indian children attending BIA-funded schools in New Mexico. The BIA-operated Navajo schools in New Mexico in most grades achieved higher test scores in 1986 than BIA-operated Navajo schools in Arizona. However, the Navajo contract schools in New Mexico (containing only a small number of students) fared poorly. The BIA-operated Pueblo schools in New Mexico achieved somewhat higher percentile rankings-- close to or above the 30th percentile for grade 4 through grade 8--than other New Mexico schools.

There are only a small number of students in non-Pueblo and non-Navajo BIA-operated schools in New Mexico. Among these "Other New Mexico" schools, the BIA-operated schools tended to achieve higher than average percentile rankings in 1986 and the contract schools lower than average percentile rankings.

Table 16 shows spring 1986 grade equivalents for BIA-funded schools within three BIA agencies in New Mexico, as well as grade equivalents for Indian students in public schools. Indian students in New Mexico public schools tended to achieve higher grade equivalents than the students in the BIA-operated schools in the Ft. Defiance and Shiprock Agency. Indian students in New Mexico public schools tended to achieve lower grade equivalents than the students in BIA-operated schools in the Eastern Navajo Agency. Overall, there is little clear evidence to support any greater or lessor success of public schools versus BIA-funded schools in educating Indian children in this area of New Mexico.

Table 17 shows percentile rankings for the full battery of tests for BIA-operated and contract schools in North Dakota, South Dakota, the remainder of the West (states other than Arizona, New Mexico, and the Dakotas) and the East (east of the Mississippi River). The BIA-funded schools in North Dakota tended to achieve percentile

TABLE 15

NEW MEXICO PERCENTILE RANKINGS FOR 1986 TEST SCORES, BY GRADE, REGION & SCHOOL TYPE

BATTERY OF TESTS (Number of Test Takers in Parentheses)

Region in N. Mex. & Type of Sch.	Grade 1	2	3	4	5	6	7	8	9	10	11	12
Navajo BIA-Op.	N/A	23% (605)	25% (579)	29% (533)	25% (461)	24% (414)	20% (331)	22% (313)	10% (189)	11% (186)	17% (163)	19% (164)
Navajo Contract	N/A	7 (41)	12 (55)	8 (50)	8 (48)	7 (35)	6 (45)	3 (32)	2 (25)	2 (18)	2 (10)	4 (4)
All N.M. Navajo BIA-Funded	N/A	21 (646)	24 (634)	26 (583)	23 (509)	23 (449)	17 (376)	19 (345)	9 (214)	9 (204)	15 (173)	18 (168)
Pueblo BIA-Op.	N/A	27 (86)	21 (93)	28 (104)	28 (95)	27 (98)	33 (16)	29 (15)	N/A	N/A	N/A	N/A
Pueblo Contract	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Pueblo BIA-Funded	N/A	27 (86)	21 (93)	28 (104)	28 (95)	27 (98)	33 (16)	29 (15)	N/A	N/A	N/A	N/A
Other N.M. BIA-Op.	N/A	46 (63)	25 (61)	32 (57)	42 (60)	32 (55)	N/A	N/A	N/A	N/A	N/A	N/A
Other N.M. Contract	N/A	8 (26)	9 (37)	11 (22)	13 (22)	16 (27)	16 (19)	19 (31)	14 (28)	9 (16)	7 (20)	11 (17)
All other N.M. BIA-Funded	N/A	30 (89)	18 (98)	24 (79)	23 (82)	26 (82)	16 (19)	19 (31)	14 (28)	9 (16)	7 (20)	11 (17)
Total N.M. BIA-Op.	N/A	25 (762)	25 (733)	29 (694)	26 (616)	25 (570)	20 (347)	20 (328)	11 (189)	11 (186)	17 (163)	19 (168)
Total N.M. Contract	N/A	7 (67)	10 (92)	9 (72)	9 (70)	10 (62)	9 (64)	9 (63)	7 (53)	4 (34)	5 (30)	9 (21)
All N.M. BIA-Funded	N/A	23 (829)	23 (825)	26 (766)	24 (686)	24 (632)	18 (411)	19 (391)	10 (242)	10 (220)	14 (193)	17 (185)

rankings somewhat above the BIA-funded school averages nationwide. Unlike Arizona and New Mexico, in North Dakota the percentile rankings of contract schools were higher than the percentile rankings of BIA-operated schools--for example, the 30th percentile for fifth graders in contract schools, compared with the 25th percentile for BIA-operated schools. In South Dakota, little difference is seen between the percentile rankings for BIA-operated and contract schools. Both BIA-operated and contract schools in South Dakota tended to obtain percentile rankings similar to other BIA-operated and contract schools nationwide.

TABLE 16

COMPREHENSIVE TESTS OF BASIC SKILLS (CTBS/FORM U)
NEW MEXICO NATIVE AMERICAN STUDENTS

Spring Testing Data, 1986

Grade[1]	Group	Reading Total	Language Total	Math Total	Total Battery	Number Students
3rd Grade	Public Schools[2]	2.9[4]	3.2	3.5	3.2	1700
	Eastern Navajo	2.9	3.4	3.7	3.4	309
	Ft. Defiance[3]	2.9	3.3	3.5	3.3	73
	Shiprock[3]	2.5	3.0	3.3	2.9	123
	BIA/Navajo Area	2.8	3.3	3.6	3.3	505
5th Grade	Public Schools	4.8	5.0	5.5	5.0	1753
	Eastern Navajo	4.8	5.5	6.1	5.2	235
	Ft. Defiance	4.1	4.8	5.1	4.5	64
	Shiprock	3.8	4.4	5.2	4.2	92
	BIA/Navajo Area	4.5	5.1	5.7	4.9	391
8th Grade	Public Schools	6.7	7.9	8.2	7.3	1848
	Eastern Navajo	6.8	9.2	8.6	8.0	150
	Ft. Defiance	5.4	6.3	7.3	5.9	70
	Shiprock	5.0	5.0	6.8	5.2	40
	BIA/Navajo Area	6.1	7.8	8.0	7.0	260

[1]The State of New Mexico only requires public schools to test the 3rd, 5th, and 8th grade.

[2]Public school grade equivalent scores derived from National Percentiles.

[3]Ft. Defiance & Shiprock scores derived from their respective school mean totals.

[4]Underlined grade equivalent scores indicate highest scores achieved, by tested area and grade level.

Source: Eastern Navajo Agency, OIEP

As shown in Table 17, percentile rankings of BIA-operated schools in the "Other West" region were lower than overall BIA-operated percentile rankings nationwide. Contract schools in the Other West region fared somewhat better than BIA-operated schools, for example, achieving the 19th percentile for eighth graders, compared with the 14th percentile for eight graders in BIA-operated schools. Schools in the East had overall percentile rankings similar to broader averages for the BIA-funded system.

TABLE 17

PERCENTILE RANKINGS FOR 1986 TEST SCORES, BY GRADE, REGION AND SCHOOL TYPE

BATTERY OF TESTS (Number of Test Takers in Parentheses)

Region and Type of School	Grade 1	2	3	4	5	6	7	8	9	10	11	12
N. Dakota BIA-Op.	N/A	23% (233)	24% (228)	27% (231)	25% (210)	28% (222)	27% (225)	21% (256)	35% (48)	24% (47)	31% (30)	26% (39)
North Dakota Contract	N/A	25 (80)	24 (81)	30 (55)	30 (58)	34 (55)	26 (60)	36 (50)	28 (103)	25 (99)	24 (73)	27 (68)
All N. Dakota BIA-Funded	N/A	23 (313)	25 (309)	27 (286)	26 (268)	29 (277)	28 (285)	25 (306)	31 (151)	25 (146)	26 (103)	27 (107)
S. Dakota BIA-Op.	N/A	21 (257)	17 (250)	19 (228)	19 (204)	23 (209)	22 (193)	16 (218)	18 (277)	18 (223)	23 (180)	22 (165)
South Dakota Contract	N/A	22 (79)	14 (115)	19 (128)	17 (101)	14 (129)	21 (195)	16 (165)	16 (148)	24 (135)	18 (90)	22 (87)
All S. Dakota BIA-Funded	N/A	21 (336)	16 (365)	19 (356)	18 (305)	19 (338)	21 (388)	16 (383)	17 (425)	18 (358)	21 (270)	22 (252)
Oth. West BIA-Op.[1]	N/A	19 (28)	15 (49)	8 (54)	10 (50)	15 (64)	16 (53)	14 (37)	15 (169)	17 (182)	17 (174)	18 (164)
Other West Contract	N/A	15 (39)	16 (28)	26 (42)	14 (35)	24 (32)	19 (48)	19 (42)	12 (84)	15 (69)	18 (57)	16 (40)
All Other West BIA-Funded	N/A	17 (67)	15 (77)	16 (96)	12 (85)	18 (96)	17 (101)	16 (79)	14 (253)	17 (251)	17 (231)	18 (204)
East BIA-Op.[2]	N/A	20 (184)	19 (173)	25 (179)	22 (142)	27 (181)	24 (165)	19 (158)	22 (156)	26 (114)	24 (93)	28 (62)
East Contract	N/A	20 (104)	20 (102)	23 (88)	25 (80)	18 (85)	20 (85)	19 (74)	17 (115)	29 (95)	26 (74)	26 (62)
All East BIA-Funded	N/A	20 (288)	19 (275)	24 (267)	22 (222)	24 (266)	22 (250)	19 (232)	20 (256)	22 (195)	21 (156)	27 (109)

[1]Excludes Arizona, New Mexico, North Dakota and South Dakota.

[2]East of Mississippi River (includes Minnesota).

BIA Test Scores by Agency

Table 18 shows overall percentile rankings for BIA-operated schools within each Agency (excluding in this case contract schools). Many Agencies have a small number of students in each grade attending BIA-operated schools--in some cases fewer than 25 students. With such small numbers of students there is often considerable variation in percentile rankings from grade to grade, even within the same set of BIA-operated schools within a given Agency.

TABLE 18

PERCENTILE RANKINGS FOR BIA-OPERATED SCHOOLS FOR 1986 TEST SCORES, BY AGENCY OR AREA

Agency or Area	BATTERY OF TESTS (Number of Test Takers in Parentheses) Grade											
	1	2	3	4	5	6	7	8	9	10	11	12
Cheyenne River Agency	N/A	15% (20)	15% (15)	8% (28)	14% (20)	12% (16)	16% (12)	14% (7)	N/A	N/A	N/A	N/A
Chinle Agency	N/A	26 (57)	11 (148)	7 (202)	7 (154)	8 (143)	16 (159)	14 (134)	11 (91)	10 (103)	15 (105)	22 (117)
Choctaw Agency	N/A	12 (111)	13 (100)	21 (103)	13 (89)	17 (108)	18 (79)	14 (86)	15 (73)	21 (48)	17 (38)	20 (27)
Eastern Area[1]	N/A	36 (73)	33 (73)	32 (76)	46 (53)	49 (73)	29 (86)	24 (72)	32 (83)	30 (66)	30 (55)	39 (35)
Eastern Navajo Agency	N/A	21 (385)	26 (372)	31 (357)	29 (300)	29 (261)	21 (233)	24 (226)	11 (189)	11 (186)	17 (163)	18 (164)
Fort Apache Agency	N/A	7 (13)	9 (13)	10 (19)	10 (10)	10 (14)	19 (12)	15 (24)	N/A	N/A	N/A	N/A
Fort Defiance Agency	N/A	22 (281)	27 (262)	24 (267)	19 (260)	21 (205)	24 (215)	19 (139)	N/A	N/A	N/A	N/A
Hopi Agency	N/A	19 (69)	22 (77)	30 (70)	45 (48)	33 (61)	35 (33)	42 (29)	N/A	N/A	N/A	N/A
Laguna Agency	N/A	46 (63)	25 (61)	32 (57)	27 (60)	33 (55)	N/A	N/A	N/A	N/A	N/A	N/A
North Pueblo Agency	N/A	52 (27)	30 (27)	39 (23)	37 (33)	38 (28)	N/A	N/A	N/A	N/A	N/A	N/A
Papago Agency	N/A	9 (85)	11 (66)	16 (62)	10 (76)	13 (75)	13 (84)	13 (76)	12 (26)	N/A	N/A	N/A
Phoenix Area[1]	N/A	43 (19)	28 (28)	15 (21)	19 (14)	33 (17)	N/A	N/A	16 (161)	16 (185)	21 (169)	21 (195)
Pima Agency	N/A	32 (15)	13 (44)	21 (31)	11 (19)	9 (19)	N/A	N/A	N/A	N/A	N/A	N/A
Pine Ridge Agency	N/A	27 (61)	21 (52)	22 (47)	18 (42)	21 (43)	27 (45)	11 (64)	15 (93)	11 (49)	16 (31)	21 (28)
Shiprock Agency	N/A	22 (224)	25 (227)	20 (212)	23 (211)	21 (177)	24 (137)	22 (116)	N/A	N/A	N/A	N/A
Southern Pueblo Agency	N/A	21 (67)	18 (66)	26 (81)	24 (62)	25 (73)	33 (16)	40 (15)	N/A	N/A	N/A	N/A
Standing Rock Agency	N/A	27 (54)	15 (60)	18 (48)	15 (42)	20 (54)	21 (49)	20 (61)	39 (33)	26 (41)	31 (30)	28 (32)
Turtle Mountain Agency	N/A	31 (17)	12 (19)	17 (23)	21 (15)	23 (11)	N/A	N/A	N/A	N/A	N/A	N/A
Western Navajo Agency	N/A	30 (221)	25 (368)	23 (346)	18 (234)	18 (268)	21 (248)	22 (239)	N/A	N/A	N/A	N/A

[1]Includes schools outside any Agency and supervised by Area Offices.

Overall, the BIA-operated school systems in the Northern Pueblo and Laguna Agencies tended to achieve some of the highest percentile rankings among any BIA Agencies. For example, for the second grade the BIA students of the Northern Pueblo and Laguna Agencies achieved percentile rankings on the battery of tests of 52 and 46, respectively. The test scores of BIA students in the Southern Pueblo Agency were closer to BIA-operated schools nationwide. However, seventh and eighth graders in the Southern Pueblo Agency obtained scores significantly above BIA-operated averages, achieving percentile rankings of 33 and 40, respectively.

There was a wide variation in test results among the Agencies on the Navajo Reservation. The percentile rankings of students attending BIA-operated schools in the Eastern Navajo Agency were the highest overall on the Navajo Reservation. Grade 2 through grade 8 were above BIA-operated averages for the Eastern Navajo Agency. The students in grade 9 through grade 12 in the Eastern Navajo Agency, however, had lower percentile rankings than BIA-operated averages. The highest testing grade in the spring of 1986 for any Navajo Agency was the Eastern Navajo fourth grade, which achieved a percentile ranking of 31.

Other than Eastern Navajo, the BIA-operated school systems of Agencies on the Navajo Reservation typically achieved percentile rankings for their grades of between 15 and 25 with the most common ranking between 20 and 25. One exception, however, was the Chinle Agency, where students in grade 3 through grade 6 tested among the lowest in any BIA-operated schools. The Chinle Agency draws disproportionate numbers of students from traditional rural Navajo backgrounds, who often do not speak English on entering school. These educational disadvantages, combined with difficulties of cultural adjustment to school, along with other unknown factors, show up in an inability of many Chinle students to score at acceptable levels on nationally standardized tests. Several schools in the Chinle Agency have whole grades where the average test result for that grade yields a percentile ranking of less than 5, and in a few cases where the percentile ranking for a whole grade is 1. Some educators at the Chinle Agency believe that the standardized tests are not measuring what is actually a significant amount of learning being accomplished by Chinle students. Clearly, however, if significant educational progress is occurring, it is frequently not showing up on tests.

The BIA schools of the Hopi Agency have some of the higher test scores in the BIA-operated system--comparable to the Northern Pueblo and Laguna Agencies. As shown in Table 18, the 48 fifth graders for the Hopi Agency achieved a percentile ranking of 45 in the spring of 1986, almost equal to the median ranking for all U.S. test takers nationwide (by definition equal to 50).

Other Agencies in the Southwestern United States tended to have test scores on the lower side, relative to BIA-operated schools nationwide. As measured by the quantitative results of standardized tests, the students of BIA-operated schools on the Papago, Fort Apache, and Pima Agencies are making less educational progress than other BIA-operated schools in the United States.

Outside the Southwest, the BIA-operated school systems of the Agencies in the Northern Great Plains achieved percentile rankings similar to BIA-operated schools elsewhere in the United States. The Cheyenne River Agency, however, was below BIA-operated national averages. Students in grade 9 through grade 12 at the Standing Rock Agency achieved higher than average percentile rankings.

In the East, the percentile rankings of the BIA-operated schools at the Choctaw Agency were lower than BIA-operated national averages, while other BIA-operated schools in the East (supervised from the Eastern Area Office) had percentile rankings well above BIA-operated national averages.

The above percentile rankings and grade equivalents by type of school, region, Agency and other categories hide a wide range of test scores of individual schools within the same category (to say nothing of individual student variation). Some broader groupings of schools may have high test results, even though one or two individual schools could have low results. Other broader groupings may have low overall test results, but could include one or two individual schools with high results. It would be unfair to draw any conclusions with respect to the testing performance of the students of any individual school, based on the broader category in which that school is included.

Achieving effective BIA schools demands accountability of teachers, principals and other participants in the BIA school system. This accountability demands some attempt at measuring student learning in a quantitative way. Unfortunately, better measures have not yet been developed, leaving standardized test scores today the leading measure available. It should be emphasized again that standardized test scores have many known deficiencies and should not be more than one part of any assessment of overall student and school performance. Test scores do not accurately show the full skills, knowledge, and degree of learning of students in BIA schools. Nevertheless, they can provide a useful tool for assessing the overall condition of BIA education as well as of the individual parts of the BIA system.

Conclusion

The students in BIA-operated and contract schools achieve scores on nationally standardized tests well below the national averages for their peers. On average, contract schools are similar to, if a little below, BIA-operated schools in percentile rankings and other test results. The limited evidence available also suggests that Indians who attend BIA-operated and contract schools achieve test results that do not differ substantially from students in public schools who have similar tribal, family and other elements in their background. In short, considered as broad categories, public, BIA-operated and contract schools have all had slight success in raising standardized test scores of Indian students to levels that would be acceptable in the long run.

There are, however, some individual schools that do much better than others. Among Agencies, the Northern Pueblo, Eastern Navajo, Laguna and Hopi Agencies are well

above the average test scores achieved by other students in BIA-operated schools. Some other Agencies are clearly having problems, if test scores are to be taken as an adequate, if imperfect, measure of the success of student learning. The widely varying test scores of BIA-operated and contract schools should stimulate further attention as to why some schools do significantly better and others significantly worse. School administrators, school boards, tribal officials, parents and others may want to try to transfer some of the methods and practices of the more effective schools to those schools that thus far have been less successful.

Chapter V

The Costs of BIA Education

In its earliest years, education was the leading task of the Bureau of Indian Affairs. As recently as 1960, almost 60 percent of BIA funds were directly allocated for education. However, as shown in Table 1, the share of education in the BIA budget has declined sharply since 1960, falling to 28 percent in 1985. Other areas of BIA expenditure such as minerals management, housing, welfare, social services, law and order, and self-determination services have commanded an increased priority and obtained growing shares of the BIA budget.

Although the percentage of BIA funds going to education has declined, the absolute levels of expenditure have risen. Table 2 shows the total funds appropriated by Congress specifically for all BIA educational activities since 1960. (These annual totals do not include budget areas, such as facilities management, that serve education as part of a broader BIA responsibility.) As shown in Table 2, BIA funds specifically appropriated for all aspects of education rose gradually from $50.1 million in 1960 to $89.6 million in 1968. Then, following the publication in 1969 of the Kennedy Subcommittee Report, *Indian Education: A National Tragedy, A National Challenge,* appropriations for BIA education almost doubled in the next five years, reaching $187.3 million in 1973. Significant increases lasted until 1975, but since then spending for education has grown modestly. In fact, on a constant-dollar basis (1986 dollars), the BIA education budget reached a maximum of $443.9 million in 1976. From 1977 to 1987, BIA spending for education declined by 33 percent in real terms.

Table 2 also shows total funding levels for operation of elementary and secondary schools. In real terms (constant 1986 dollars), funding for elementary and secondary operations reached a maximum of $320.7 million in 1973. By 1987, however, funding for elementary and secondary operations had fallen to $189.2 million. With loss of Alaska schools and other changes, student enrollment also fell over that period. Nevertheless, the funds provided per student have declined sharply over the past 15 years--in 1986 dollars, from a maximum of $7,970 per student in 1973 to $4,741 per student in 1987. (This figure does not include transfers of funds from the Department of Education, spending for facilities management and other funding not provided directly through the BIA appropriation for education.)

Table 3 shows the distribution of funding among the different types of educational activities undertaken by the BIA (corresponding to categories of appropriations for-

TABLE 1

BIA OPERATING PROGRAMS AS A PERCENT OF TOTAL OPERATING BUDGET

	FY 60	FY 61	FY 62	FY 63	FY 64	FY 65	FY 66	FY 67	FY 68	FY 69	FY 70	FY 71	FY 72	FY 73	FY 74	FY 75	FY 76	FY 77	FY 78	FY 79	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85
Education[1]	58	58	51	51	50	49	49	48	47	49	47	46	47	50	49	48	45	41	38	34	34	32	32	30	29	28
Tribal government services	--	--	--	--	--	--	--	--	--	--	--	--	--	3	2	2	2	2	2	2	2	2	3	3	3	3
Welfare & guidance/ social services	7	7	8	7	8	9	9	8	11	10	12	16	16	11	14	13	13	12	11	10	11	11	11	10	11	11
Employment development	3	3	7	7	7	8	8	9	11	12	13	11	11	1	3	3	9	8	7	6	6	5	3	3	3	3
Law & order/ law enforcement	1	1	2	2	2	2	2	2	2	2	2	2	2	4	3	2	3	4	3	3	3	4	4	4	4	5
Housing[2]	--	--	--	--	--	--	--	--	--	--	--	--	--	3	3	3	3	3	3	3	2	3	4	5	3	2
Self determination services	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5	6	6	6	6	6	6	7	3
Business enterprise development	--	--	--	--	--	--	--	--	--	--	--	1	--	1	1	3	3	2	1	1	1	1	1	1	1	2
Road maintenance	4	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Trust management services	4	5	4	4	5	5	4	5	4	4	3	3	3	3	3	4	4	5	5	5	5	5	6	5	5	5
Agri./forestry/soil and moisture conservation	12	13	12	15	14	12	12	11	11	10	10	10	10	7	6	6	6	7	9	9	7	9	9	10	9	10
Minerals, Mining, Irrigation/Power	2	*	1	1	1	1	1	1	1	1	1	1	*	*	*	*	1	1	1	2	2	2	2	2	2	2
B&U Repair/Facil. Management	6	5	8	8	8	8	9	11	8	9	7	7	7	11	11	11	11	12	10	11	10	10	10	13	15	14
General Administration	4	4	4	4	3	3	3	3	3	2	2	2	2	3	3	2	3	2	2	7	7	6	7	6	7	8

[1]Included O&M until 1973.

[2]Included in agriculture, welfare and guidance until 1973.

*Less than one percent.

Source: Department of the Interior's Office of Budget.

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TABLE 2

BIA FUNDS DIRECTLY APPROPRIATED
FOR EDUCATION

Fiscal Year	Funds Appropriated All BIA Education[1] (mm of Dollars)	Constant-Dollar Funding for All BIA Education (mm of '86 Dollars)	Constant-Dollar Elem. & Second. School Operations (mm of '86 Dollars)	Constant-Dollar Elem. & Second. Funds perStudent ('86 Dollars)
1960	$50.1	$186.4	N/A	N/A
1962	53.5	192.9	N/A	N/A
1964	66.0	230.7	N/A	N/A
1966	76.0	249.7	N/A	N/A
1968	89.6	273.3	N/A	N/A
1970	119.5	327.3	$262.7	$6,065
1971	144.1	356.4	286.4	6,658
1972	167.5	414.2	314.1	7,305
1973	187.3	435.1	320.7	7,960
1974	199.7	425.3	278.0	6,540
1975	226.5	439.2	278.7	7,882
1976	243.6	443.9	285.6	6,965
1977	236.7	404.5	284.2	7,404
1978	258.2	411.3	290.4	7,609
1979	262.2	383.6	264.9	6,746
1980	270.1	363.4	259.8	5,996
1981	270.2	330.6	231.7	5,073
1982	268.3	308.6	202.5	4,718
1983	300.4	332.5	198.8	4,674
1984	257.9	275.8	188.6	4,404
1985	271.8	280.3	182.9	4,356
1986	259.3	259.3	181.2	4,499
1987	279.9	270.2	189.2	4,741
1988	273.5	253.9	175.8	4,440

[1]Includes only BIA funds specifically designated for education subactivities in the BIA budget. Includes elementary and secondary school operations, Johnson-O'Malley funds, and continuing education. Does not include funding for the operation and maintenance of school facilities, repair and improvement of school facilities, or the construction of new schools.

TABLE 3

APPROPRIATIONS FOR BIA EDUCATION, BY PROGRAM (000)

TYPE OF PROGRAM	1988	1987	1986	1985	1984	1983	1982	1981	1980
SCHOOL OPERATIONS	$189,443	$195,994	$181,235	$177,265	$176,933	$179,556	$176,106	$189,423	$193,598
ISEP	163,120	159,731	150,174	153,954	154,010				
Standards Compli.	300	300	1,435						
Institution, Hand.	1,428	1,428	2,228	2,342	2,390				
Substance/Alc.Abuse	2,400	5,400							
Contract Support		7,188	6,879						
School Boards	1,235	1,235	1,182	1,715	525				
Student Transport.	11,962	11,812	11,139	10,187	9,958				
Solo Parents Prog.	108				8,450				
Technical Support	8,890	8,900	8,198	9,067					
Pre-Kindergarten Pro.					1,600				
JOHNSON-O'MALLEY	20,351	22,824	22,053	25,674	26,000	66,929	37,054	29,476	29,388
JOM		20,324	19,618						
Contract Support		2,500	2,435						
CONTINUING EDUCATION	61,469	58,965	54,011	53,256	52,821	51,658	52,446	51,284	47,047
Postsecondary Sch.	13,862	9,577	8,909	9,045	8,892				
High.Ed.Scholarships	1,910	1,750	1,856	2,050	2,092				
Trib.Control.CommCol	13,786	12,853	11,701	11,819	11,893				
Higher Education	28,770	31,229	27,988	26,868	26,197				
Adult Education	3,141	3,566	3,557	3,474	3,747				
ADMINISTRATION	2,281	2,125	1,992	2,179	2,167	2,233	2,670		
CONTRACT SUPPORT				13,496					
RESCISSION				-47					
TOTAL:	$273,544	$279,908	$259,291	$271,823	$257,921	$300,376	$268,276	$270,183	$270,060

TYPE OF PROGRAM	1979	1978	1977	1976
SCHOOL OPERATIONS	$181,128	$182,334	166,296	156,729
JOHNSON-O'MALLEY	31,675	34,645	31,452	30,952
CONTINUING EDUCATION	49,439	41,224	38,952	55,909
TOTAL:	$262,242	$258,203	$236,700	$243,590

mally shown in the BIA budget). School operations for elementary and secondary education is the largest single item in the BIA education budget. Most of these funds are allocated to schools on a weighted per-student basis through the Indian School Equalization Program or the "ISEP" as it is commonly called. In 1987, each BIA and contract school received $2,230 for each "student unit" (added cost factors are designated by proportions of student units) under the ISEP formula.

However, the actual ISEP payment in 1987 averaged $3,814 per BIA-funded student. This was because most students have special factors or "weights" which give them additional claims to total ISEP funds. The two most important weights increase the share of ISEP funds received by schools for boarding students and for students in grades 1 to 3 and in grades 9 to 12. Hence, for boarding students without any special problems, BIA and contract schools received on average $5,586 per student from the 1987 distribution of ISEP funds. For day students without any special problems, BIA and contract schools received on average $2,577 per student from ISEP funding in 1987. The ISEP add-on factors also include special weights for students in bilingual programs, weights for handicapped students, weights for emotionally disturbed students, and others. Figure 1 shows the current regulations establishing student weights for the distribution of ISEP funds.

The Johnson-O'Malley program allocates funds to public schools for the provision of assistance to Indian students to meet their special needs. In 1986-1987, as shown in Table 3, $22.8 million was appropriated for Johnson-O'Malley, or around $128 per Indian student receiving assistance in public schools. Other major budget categories include higher and adult education and tribally controlled community colleges, which in 1987 received $34.8 million and $12.8 million, respectively.

Table 3 also shows how funding for school operations is distributed among the different types of program elements. As indicated above, ISEP funding is the largest single element of school operations, receiving $159.7 million in 1987. Other significant elements of school operations include transportation ($11.8 million in 1987), contract support ($7.2 million) and, most recently, substance abuse ($5.4 million). Indian school boards received $1.2 million in 1987 for their operation and the training of board members.

In addition to the funds directly appropriated for educational activities, which are shown in Table 3, there are several other significant sources of educational funding

FIGURE 1
Student Weights for ISEP Funding

§ 39.12 Entitlement for instructional purposes.

BIA educational funds for the instruction of elementary and secondary Indian children shall be computed according to the following weighted student unit factors:

Basic programs	Base weights
Kindergarten	1.00
Grades 1 to 3	1.20
Grades 4 to 8	1.00
Grades 9 to 12	1.30

Supplemental program	Add-on weight
Intense bilingual	.20
EXCEPTIONAL CHILD PROGRAMS	
Full time—high service level:	
Deaf	3.00
Blind	3.00
Severely multihandicapped	3.00
Severely and profoundly retarded	3.00
Students requiring hospital/homebound instruction	3.00
Severely emotionally disturbed	3.00
Severely emotionally disturbed (nonsevere)	1.00
Specific learning disabled	1.00
Mentally retarded	1.00
Part time—moderate service level:	
Emotionally disturbed	.50
Specific learning disabled	.50
Mentally retarded	.50
Multihandicapped	.50
Hard of hearing	.25
Visually handicapped	.25
Orthopedically impaired	.25
Other health impaired	.25
Speech impaired	.25

§ 39.13 Entitlement for residential purposes.

Basic funds for student residential purposes shall be computed according to the following weighted student unit factors:

Base programs	Add-on weight
Kindergarten (For FY 80 only, 0 factor thereafter)	1.40
Grades 1 to 3	1.40
Grades 4 to 8	1.25
Grades 9 to 12	1.25

Base programs	Add-on weight
EXCEPTIONAL CHILD PROGRAMS	
All full-time handicapped students	.50
Part time:	
Orthopedically impaired	.25
Other health impaired	.25
Emotionally disturbed	.25
Mentally retarded	.25
Multihandicapped	.25
Intense Residential Guidance	.50

§ 39.14 Entitlement for small schools.

To compensate for the additional costs of operating small schools, qualified schools shall receive the following adjustments:

(a) Instructional programs in day and boarding schools. For each separate small school having an instructional average daily membership count (called x) of less than 100 students, the formula [(100-x) divided by 200] times x shall be used to generate add-on weighted pupil units for each such school.

(b) *Boarding school residential programs.* For each separate small boarding school having a resident average daily membership count (called y) of less than 100 students, the formula [(100−y) divided by 200] times y shall be used to generate add-on weighted pupil units for each such boarding school.

(c) *Dormitory residential programs serving public schools.* For each small dormitory program having an average daily membership count (called z) of less than 100 students, the formula [(100−z) divided by 200] times z shall be used to generate add-on weighted pupil units for each dormitory.

contained within the BIA budget. Table 4 shows funds in a separate account allocated for new school construction from 1978 to 1987. Construction funding has varied greatly from year to year. In 1978, new school construction was only $5.3 million, but then rose sharply to $35.6 million in 1979 and $29.5 million in 1980. In 1986 and 1987, new school construction has been reduced to about $5 million. Routine operation and maintenance of school facilities has historically been a large element in the total cost of operating the BIA education system. For budget purposes, the schools are included as a part of the operation and maintenance of all BIA facilities, and school facilities management thus is not included in the budget figures shown in Table 3. Table 5 shows facilities operation and maintenance costs for education for the past seven years. In recent years, these costs have been as much as 20 percent of total BIA spending on its education program. In 1986, the costs of routine operation and maintenance of school facilities were $44.6 million, or more than $1,000 per pupil.

Significant additional sources of BIA spending for education include a separate budget category for large scale improvements and repairs of school facilities and the overhead costs of general management support for the facilities program. Figures for these sources of educational funding were obtainable only for recent years, and are shown in Table 6 for 1985 through 1987. In 1986, educational spending for major school renovations and for other large scale improvements and repairs in school facilities was $17.7 million and for the education portion of general facilities management support was $8.6 million.

Significant funds are also directly allocated to BIA and contract schools under the funding formulas established under several assistance programs of the U.S. Department of Education (ED). These funds are first set aside for transfer to BIA and are then distributed to the individual schools by the BIA (using criteria set by ED). The two most important of these programs, in terms of total dollar outlay and student impact, are Chapter 1 of the Elementary and Secondary Education Act of 1965 and the "special education" funding under the Education of the Handicapped Act of 1975. Chapter 1 funds are targeted to students in schools throughout the United States who are eligible because of educational deficiencies and low family income (refer to Chapter XIII for more background on this program). Although about 10 percent of all students nationwide were participants in Chapter 1 programs, a much larger share of BIA students receive Chapter 1 funding. In 1986, 15,497 BIA-funded students, or 40 percent of all such students, received an average of $1,434 per student in Chapter 1 services.

Under the Education of the Handicapped Act, a total of $1.2 billion in "special education" funds were distributed by the Federal government in 1986 to schools throughout the United States. Nationwide, about 9 percent of U.S. elementary and secondary students benefitted from this special education funding. In 1986, a total of 5,927 BIA-funded students, or 15.5 percent of all BIA-funded students, were entered in special education programs. Total special education funds received by BIA-funded students from the U.S.Department of Education equalled $11.5 million, or $1,940 per special education student in 1986.

TABLE 4

BIA FUNDING OF NEW SCHOOL CONSTRUCTION
(millions of dollars)

Year	BIA Outlays for New School Construction[1]
1978	$5.3
1979	35.6
1980	29.5
1981	44.3
1982	6.5
1983	34.9
1984	11.1
1985	14.0
1986	4.8
1987	5.1

[1]Includes planning and design outlays for new schools. Includes Bureau- and tribally-operated new schools.

TABLE 5

BIA COST OF OPERATION AND MAINTENANCE OF SCHOOL FACILITIES
(millions of dollars)

Year	Funds Used for Oper. & Maint. of School Facil.[1]
1981	$40.1
1982	40.8
1983	42.8
1984	39.2
1985	40.7
1986	44.7
1987	42.7

[1]Includes funds for the upkeep, minor repair and general maintenance of school buildings, dormitories and other school facilities.

TABLE 6

BIA FUNDING FOR FACILITIES IMPROVEMENT AND REPAIR AND FACILITIES MANAGEMENT SUPPORT

(millions of dollars)

Type of Cost	1985	1986	1987
Facilities Improvement and Repair (FIR)[1]	$17.7	$17.7	$18.3
Facilities Management Support[2]	10.0	8.6	7.9
Total Funds	**27.7**	**26.3**	**26.2**

[1]Facilities Improvement and Repair (FIR) is separate from routine facilities operation and maintenance and includes major renovation, reconstruction, and repair projects for schools.

[2]Represents an allocation of 50 percent to education of general funds provided by BIA for facilities management support for all purposes. Also includes an allocation of 50 percent of the budget of the Office of Construction Management (OCM) in the Office of the Assistant Secretary for Policy, Budget and Administration.

The total Department of Education funds set aside for BIA and contract schools under Chapter 1, special education and other programs are shown in Table 7 for the years 1970 to 1987. In 1986, direct funding for BIA and contract schools provided under these ED programs totaled $33.9 million, a small decline from 1985, but some-

TABLE 7

U. S. DEPARTMENT OF EDUCATION
FUNDS SET ASIDE FOR BIA AND CONTRACT SCHOOLS[1]

(millions of dollars)

Year	Chapter I	Special Education	Other	Total
1970	$11.7	$0.1	$0.2	$12.0
1971	17.5	0.1	0.3	17.9
1972	17.6	0.1	0.2	17.9
1973	16.7	0.1	0.3	17.1
1974	17.6	0.2	0.3	18.9
1976	17.6	1.0	0.3	19.2
1977	17.6	2.0	0.5	20.1
1978	17.6	2.5	0.5	20.6
1979	20.3	8.0	0	28.8
1980	19.5	8.0	0	28.2
1981	19.5	9.1	0	28.6
1982	18.1	9.2	0	27.3
1983	19.9	9.6	0	29.5
1984	21.9	10.6	0	32.5
1985	23.2	11.2	0.5	34.9
1986	22.2	11.5	0.2	33.9
1987	24.8	17.1	0.4	42.3

[1]Includes only programs providing funds set aside specifically for BIA education.

Source: Office of Planning, Budget, and Evaluation; U.S. Department of Education.

what higher than earlier years. Direct ED funding in 1986 amounted to $842 for every pupil enrolled in BIA and contract schools.

Although not a set-aside program, the Department of Education's bilingual education program also provides funds for BIA and contract schools. Funding under Title IV of the Indian Education Act of 1972 is provided to contract schools, although not to BIA-operated schools. The Department of Agriculture provides funds to both BIA-operated and contract schools for school lunches. In 1986, these three programs provided an additional $17.1 million in funding for BIA education.

Table 8 shows for 1985 through 1987 the total funds spent on BIA-funded elementary and secondary schools from direct and indirect sources. Total education fund-

TABLE 8

TOTAL FUNDING IN SUPPORT OF BIA AND CONTRACT ELEM. AND SECONDARY SCHOOLS, DIRECT AND INDIRECT SOURCES (Millions of Dollars)

TYPE OF FUNDING	1985	1986	1987
ISEP Funding	$154.0	$150.2	$159.7
Technical Support	9.1	8.2	8.7
Other School Operations	14.2	22.9	27.4
Administration	2.2	2.0	2.1
New School Construction	14.0	4.8	5.1
School Facilities Routine Operation & Maintenance	40.7	44.7	42.7
School Facilities Major Improvement & Repair	17.7	17.7	18.3
School Facilities Management Support	10.0	8.6	7.9
Department of Education Set-Asides[1]	34.9	33.9	42.4
Other Dept. of Educ. Funding[2]	18.0	17.6	7.7
School Lunches[3]	7.5	8.3	8.2
Grand Total:	322.3	318.9	330.2

Total 1986 funding per pupil, BIA and contract schools = **$7,917** per pupil.

1986 average funding per pupil, all U.S. public schools = **$4,051** per pupil (including an estimate of capital costs).4

[1]Includes Chapter 1, special education and science/math funds.

[2]Includes bilingual education, Title IV (contract schools only) and impact aid funding (estimated).

[3]Department of Agriculture funds.

[4]Funding level shown in U.S. Department of Education's Center for Education Statistics, The Condition of Education: A Statistical Report (1987 Edition), p. 34.

Sources: See tables 3, 4, 5, 6, 7 and 8 in Chapter V.

ing for BIA and contract schools from all these sources was $318.9 million in 1986. ISEP funding represented 47 percent of 1986 funding by the Federal Government for BIA and contract schools. New school construction and the several other accounts for facilities management represented 24 percent of total 1986 spending for BIA education. Given the 1986 enrollment (average daily membership) of 40,280, total funding per pupil for BIA education in 1986 equalled $7,917. This BIA funding level was equal to 197 percent of the average 1986 expenditures of $4,051 per pupil for U.S. public elementary and secondary education as a whole (a figure which includes an estimate of capital costs--which are also included in the BIA figures).

It should be kept in mind that aggregate costs per student mask wide variations in costs per student at individual schools or among categories of schools. The aggregate figures serve to portray the overall funding level for an entire system of schools. While this is useful information, for many purposes disaggregated data is also needed. Thus, there may be important differences in average funding levels between say BIA-operated schools and contract schools, which are not revealed by the aggregate data. Some individual schools may still have insufficient funds, although overall funding levels for all schools together may be adequate.

Contract schools have available to them some sources of funds that are not available to BIA-operated schools. For example, in 1986 total Federal payments to contract schools under Part A and Part B of Title IV of the Indian Education Act of 1972 equalled $6.4 million. This spending amounted to $601 per student in contract schools. BIA-operated schools did not receive Title IV funding.

Contract schools received $6.9 million in special "contract support" funding in 1986, which were also funds not available to BIA-operated schools. This spending amounted to $648 per student attending contract schools. Including both Title IV and contract support, contract schools received around $1,250 per contract-school student from funding sources that were not available to BIA-operated schools. Excluding those special funding sources that were limited to contract schools, total spending for BIA education in 1986 came to $7,487 per student in the BIA-funded system.

It should also be kept in mind that revenues and expenditures do not indicate the full range of resources available to a school. Parent volunteer efforts, business contributions, charitable gifts and other items may add to the total resources available to a school, even though they do not show up in budget figures. In this regard, many BIA schools may receive less off-budget assistance, as compared with public schools. Hence, BIA schools may require higher direct funding to achieve the same level of total resource availability.

If BIA education had incurred expenses equal to the national average funding per pupil, the total spending for BIA elementary and secondary education in 1986 would have been $163 million--compared with actual total spending of $319 million. It is

thus important to examine the reasons for the significantly higher BIA level of educational expenditure.

High-Cost Factors in BIA Education

BIA education is unique in several ways. Around 35 percent of the students in BIA-operated schools attend boarding schools. Residing at a boarding school more than doubles the cost of educating an Indian student, as compared with a day student. Further, no other school system is spread across the entire United States. In order for BIA administrators based in Washington, D.C. to visit the schools, they fly 2,000 to 3,000 miles each way. Agency Superintendents, Area personnel and other staff often log 100+ miles per day trip to conduct school business within their respective districts. Such a geographically dispersed school system boosts transportation costs whenever BIA school administrators from various parts of the system meet to discuss instructional and administrative issues.

At the local level, the BIA serves a rural and isolated student population. Getting this population to and from school involves unusually high transportation costs. Even with long bus routes and student travel times, the number of Indian students that can be transported to a common location may be sufficient only for a small school. Lacking the efficiencies of a larger operating size, small schools in general cost significantly more per student than larger schools. In small schools, for example, more teachers are needed per pupil, because sharp fluctuations in class sizes make it impossible to ensure a full class size for every teacher for each year. Small schools often have higher operating and maintenance costs than do their larger school counterparts. Thus, BIA costs are higher in comparable categories than for other school systems in the United States.

The BIA recently developed estimates of the 1985 costs of its basic instructional programs (excluding the dormitory and other residential elements). These program costs included operating and transportation costs of schools, operation and maintenance of the school facility, and contract support funds (thus leaving out new school construction, major renovations and repairs, and Department of Education funds for special programs). In 1986, these basic instructional program costs were 71 percent of total spending for BIA education from all sources. As shown in Table 9, limited to basic instructional costs, small schools with fewer than 100 students imposed a cost in 1985 of $1,102 per student above the $3,765 average for all BIA-funded schools. Once school size exceeds 100 students, however, there is only a small reduction in average cost per student, as school size increases.

Many BIA students live in locations too remote for day schools. For this and other reasons, over the years BIA students have had no other option than to attend BIA-operated boarding schools. Even with a strong trend towards day schools, fully 13,198 students, or 34 percent of the students in BIA and contract schools, were still boarding students in 1986. Another 21 percent were day students who attended schools that had boarding facilities (somewhat misleadingly, these day students are typically

TABLE 9

1985 BASIC INSTRUCTION PROGRAM COSTS FOR BIA EDUCATION, BY SIZE OF SCHOOL[1]

Size of School	Total 1985 Number of Students	1985 Costs (mm)	1985 Costs Per Student
Less than 100 students	3,381	$16.5	$4,867
100-250 students	9,368	36.8	3,925
251-500 students	12,800	48.2	3,765
500 + students	13,591	45.9	3,375
All schools	39,120	147.3	3,765

[1]Includes operating costs and routine facilities maintenance costs for BIA and contract schools for instructional purposes only. Costs of residential programs for boarding students are excluded. Also does not include costs of new school construction, major facilities improvements and repairs (FIR), general facilities support or DOE funding. Includes costs for both BIA schools and contract schools. Excludes dormitories.

included in statistics showing the numbers of students attending boarding schools). The costs of each actual boarding student substantially exceed the costs of each day student. Under the ISEP formula, a student living in residence at a school generates funds for that school which average 220 percent of the funding level generated by a day student.

Table 10 shows the results of a 1982 BIA study delineating average BIA costs for different types of schools (again limited to basic operating and routine maintenance costs). In this study, the calculation of cost per student attending boarding schools was based on the total student population of the boarding school (thus including in the boarding total, the considerable number of day students who attend BIA and contract schools with boarding facilities). As shown in Table 10, BIA reservation boarding schools on average had a cost per student equal to 156 percent of the cost per student in day schools. Contract reservation boarding schools had similar costs. The average cost of off-reservation boarding students was 250 percent of the average cost of day students. Simply for the BIA to provide a dormitory facility for a public school student involved a cost to the BIA per boarder of $4,141, substantially exceeding the total cost to the BIA for a day student in its schools.

Another important factor significantly raising BIA costs per student is that BIA serves an educationally disadvantaged population. Many students live in homes that suffer from poverty, unemployment and other social problems. According to the best available estimates, approximately 30 percent of BIA-funded students do not speak English as a primary language at the point of entering school. Many BIA and con-

TABLE 10

1982 BASIC PROGRAM COSTS PER STUDENT, BY TYPE OF SCHOOL ATTENDED[1]

Type of School[2]	Number of Students	Average Cost per Student[2]	Percent of BIA Day Cost
BIA Day	9,403	$3,274	100%
BIA Reservation Boarding[3]	17,144	5,107	156
Contract Day	5,817	3,372	103
Contract Reserv.Boarding[3]	2,920	4,959	151
Off-Reservation Boarding	3,910	8,195	250
Dormitory	1,966	4,141	126
All Students	41,160	4,680	143

[1]Costs include ISEP, school board training, transportation and routine facilities operation and maintenance.

[2]Excludes Alaska schools.

[3]Averages based on total student populations including day students at boarding schools.

tract students require special attention, not only in learning English, but in overcoming other educational obstacles as well. Compared with other schools, higher percentages of Indians are eligible for handicapped assistance in school. Serving the special needs of Indian students involves significant additional resources for the schools.

Table 11 shows approximate estimates of the impact of these four high-cost BIA factors--long transportation distances, small schools, a boarding program, and special needs of disadvantaged children--on the cost of BIA education per student. The estimates reflect a calculation of the added costs to BIA, as compared with typical U.S. elementary and secondary schools, because of these high-cost factors.

In the case of transportation, for example, the average cost throughout the United States for busing a student to and from school was $236 in 1984. For BIA the average bus transportation cost per student in 1984 was about $510 per year, more than double the U.S. average. In addition, the BIA spends more than $1.0 million per year in busing boarding students to and from their homes on weekends and at other times. The BIA is gradually busing more and more of its boarding students to and from their homes for weekend visits.

If BIA had shorter transportation distances and typical busing costs for the United States, the annual cost for the 17,500 students it transports each day would be about $4 million. Instead, the BIA cost for busing these students is about $9 million. Moreover, if it were a typical school system, the BIA would also save about $1 million in costs of transporting boarding students. Hence, as shown in Table 11, the

TABLE 11

APPROXIMATE ESTIMATES OF THE IMPACT OF HIGH-COST FACTORS IN BIA EDUCATION

High-Cost Factor	Total BIA Costs (mm)	Part of BIA Costs Due to High-Cost Factors (mm)	Approximate Per-Student Budget Impact of High-Cost Factor
Longer Transportation Distances	$10	$6.0	$150
Smaller Schools[1]	$16	$3.5	$90
Boarding Program	$36 - $60	$36 - $60	$900 - $1500
Disadvantaged Students[2]	$34	$29.9	$734
All Factors	**$97 - $121**	**$75 - $102**	**$1874 - $2474**

[1]Schools with fewer than 100 students.

[2]Costs shown represent BIA funds received from the Department of Education for Chapter 1 and special education programs.

"extra" transportation costs due to the special circumstances of BIA education have been about $6 million per year. Averaged over all the students in the BIA and contract system in 1986, total costs of BIA education would have been reduced by about $150 per student, if the BIA had faced typical U.S. transportation requirements.

As shown in Table 9, the added basic program costs for unusually small schools (less than 100 students) come to about $1,000 per student. However, there are fewer than 3,500 BIA and contract students enrolled in these small schools. Hence, if the small schools did not exist, and all BIA and contract students were attending schools of 100 students or larger, the savings in basic program costs (operating plus routine facilities maintenance) would be only about $3.5 million. As shown in Table 11, the existence of many unusually small schools in the BIA system adds only about $90 per BIA and contract student to the total operating and maintenance costs of the BIA system.

The provision of boarding facilities, however, has a much greater impact on the overall costs of BIA education. There are various ways in which this impact can be estimated. Under the ISEP formula, day students without any special educational problems or need of special assistance generated funds in 1987 of $2,577 per student

(on average). A similarly unexceptional boarding student generated ISEP funds for the school he or she attended of $5,586. The total additional ISEP cost for boarding students was thus $3,009 per student. For all 11,950 boarding students in 1987, the additional cost for the boarding program came to $36.0 million. Averaged over all 1987 students (day and boarding) in BIA and contract schools, the boarding program added about $893 per student to total costs of BIA education.

However, as shown in Table 8, funds distributed under the ISEP formula are only slightly more than half of the total costs of BIA education. The ISEP formula does not include funds to pay for routine facilities management, nor does it cover major renovations and repairs or new construction. Yet, the construction, maintenance, renovation and repair of dormitory facilities involves significant costs to BIA. Not counting ED funds transferred to BIA for special programs, ISEP funding covers only about 60 percent of BIA education costs, leaving 40 percent to be obtained from other sources. In short, the ISEP funding level would have to be increased by about two-thirds to cover all BIA education costs.

If such a 66 percent increase is applied to the BIA boarding program, the estimate given for full costs could be raised to as much as $60 million. Averaged over all BIA and contract students, this estimate suggests that the boarding program could add as much as $1,500 per student to total BIA education costs.

It is difficult to estimate the additional costs due to the disadvantaged population served by BIA. In a sense, serving a disadvantaged student population lies at the heart of the education mission historically served by BIA. However, some elements of these costs can be estimated. The Chapter 1 and special education programs of the U.S. Department of Education are specifically designed to assist students with special educational needs and problems. Total Federal spending for these programs was $3.5 billion and $1.2 billion, respectively, in 1986. Averaged over all U.S. students in elementary and secondary schools throughout the United States, Chapter 1 and Federal special education funding equalled $103 per student. By comparison, the equivalent figure averaged over all students in BIA and contract schools was $837 per student in 1986. Hence, the added BIA cost of Chapter 1 and ED-funded special education was $734 per student in 1986 above the national average cost per student.

Taking into account all four of the high-cost factors discussed above in BIA education, as shown in Table 11, these factors cumulatively add about $1,874 to $2,474 per student to the cost of BIA education. Since total BIA 1986 costs of all kinds came to $7,917 per student, allowance for the four high-cost factors would bring the average cost per student down to a range of $5,443 to $6,043 per BIA-funded student.

However, this reduction still leaves BIA costs per student well above the national average cost for U.S. public schools in 1986 of $4,051. The four high-cost factors combined would seem to explain only about 50 percent to 65 percent of the difference between the 1986 BIA average cost and the 1986 national average cost for U.S. public schools. This assessment is consistent with the results of a 1982 study by the Interior

Department's Office of Budget. This study estimated that, limited to BIA day schools alone, these schools had average costs that were in the range of 130 percent to 160 percent of the average costs of U.S. public schools.

The Staffing of BIA Schools

In seeking to understand why BIA schools cost more per student, even after adjusting for high-cost factors, it is important to examine personnel costs and the staffing patterns of BIA schools. The costs of operating a school system consist in large part of two elements--personnel costs and facilities costs. However, the facilities costs of BIA schools are funded outside the direct appropriations for education. Total personnel costs for BIA education employees were about $145 million in 1987, or about 80 percent of the total funding for the BIA-operated school system (excluding contract schools). It is almost inevitable, therefore, that an explanation for above-average education costs must lie significantly in above-average personnel costs and in the personnel policies and staffing patterns that generate these costs.

If BIA personnel costs are high, it is not because of the salaries for BIA teachers or the number of teachers. A beginning BIA teacher in 1987 earned a salary of $15,067. The maximum BIA salary for an ordinary teacher was $24,064. As seen in Table 12, teacher salaries in public schools throughout the United States substantially exceed the levels of teacher pay offered by BIA.

The BIA also does not have an unusually large number of teachers. As shown in Table 13, BIA personnel records in 1987 showed only 1,039 employees who were classified as teachers. Counting only these BIA employees clearly identifiable as teachers, the BIA pupil-teacher ratio was 27.6 to 1 in 1987, well above levels reported by public schools.

Determining the actual total number of BIA teachers is complicated, however, by the inability to identify all BIA personnel who perform teaching functions in BIA-operated schools. As shown in Table 13, BIA personnel records in 1987 showed 1,082 employees who were classified as professionals, but were not recorded in the professional categories of teacher, administrator or counselor. These "other professionals" include many employees loosely classified as "education specialists." Some portion of education specialists actually engage in teaching activities as part of their job responsibilities. But the precise number of "other professionals" who teach cannot be determined from current personnel classifications. As a consequence, it is not possible from personnel records to determine the exact number of personnel with some teaching duties in the BIA school system. Making an adjustment for these personnel, BIA student-teacher ratios may well be comparable to public schools (as the reported student-teacher ratios from the schools themselves suggest).

As shown in Table 14, BIA teachers in 1987 represented only 18.4 percent of total instructional personnel (excluding dormitory personnel) in BIA schools. By com-

TABLE 12

ESTIMATED AVERAGE ANNUAL SALARY OF CLASSROOM TEACHERS IN PUBLIC ELEMENTARY AND SECONDARY SCHOOLS, BY SELECTED STATES: 1969-70 TO 1985-86

State or other area	Unadjusted Dollars				Adjusted Dollars (1985 purchasing power)[1]			
	1969-70	1979-80	1983-84	1985-86	1969-70	1979-80	1983-84	1984-85
United States	**$8,635**	**$15,980**	**$21,918**	**$25,313**	**$24,878**	**$22,386**	**$23,432**	**$24,280**
Alaska	10,560	27,210	37,807	41,480	30,425	38,141	40,419	40,905
Arizona	8,711	15,054	21,642	24,680	25,097	21,102	23,127	24,059
California	10,315	18,020	24,843	29,132	29,719	25,259	26,559	28,106
Colorado	7,761	16,205	23,276	25,892	22,360	22,715	24,884	25,164
Florida	8,412	14,149	19,497	22,250	24,236	19,833	20,844	21,441
Hawaii	9,453	19,920	24,357	25,845	27,235	27,923	26,040	25,343
Idaho	6,890	13,611	17,985	20,969	19,851	19,079	19,228	20,615
Illinois	9,569	17,601	24,191	27,190	27,569	24,672	25,862	26,217
Kansas	7,612	13,690	19,411	22,644	21,931	19,190	20,752	21,734
Maine	7,572	13,071	17,328	19,583	21,816	18,322	18,525	18,862
Maryland	9,383	17,558	23,870	27,186	27,033	24,612	25,519	26,612
Minnesota	8,658	15,912	24,350	27,360	24,945	22,305	26,032	26,189
Mississippi	5,798	11,850	15,812	18,443	16,705	16,611	16,904	16,385
Montana	7,606	14,537	20,690	22,482	21,914	20,377	22,120	22,335
Nevada	9,215	15,295	22,360	25,610	26,549	22,841	23,905	23,174
New Mexico	7,796	14,887	20,571	22,644	22,461	20,868	21,992	22,444
New York	10,336	19,812	27,319	30,678	29,779	27,771	29,207	29,032
North Dakota	6,696	13,263	19,260	20,816	19,292	18,591	20,591	20,673
Oklahoma	6,882	13,107	18,630	21,419	19,828	18,373	19,917	19,571
Oregon	8,818	16,266	23,155	25,788	25,406	22,801	24,755	25,086
Pennsylvania	8,858	16,515	22,703	25,853	25,521	23,150	24,272	24,895
South Dakota	6,403	12,348	16,480	18,095	18,448	17,309	17,619	17,885
Texas	7,255	14,132	20,170	25,160	20,902	19,809	21,564	23,935
Utah	7,644	14,909	20,007	22,341	22,023	20,899	21,389	21,785
Washington	9,225	18,820	24,365	26,015	26,578	26,381	26,048	26,246
Wisconsin	8,963	16,006	22,811	26,525	25,823	22,436	24,387	25,291
Wyoming	8,232	16,012	25,197	27,224	23,717	22,445	26,938	27,165

[1]Based on the Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor.

Source: U.S. Department of Education, Center for Education Statistics, Digest of Education Statistics, 1987.

TABLE 13

1987-88 NUMBER AND TOTAL SALARIES OF BIA EDUCATION PERSONNEL, BY TYPE OF PERSONNEL[1]

Personnel type	Number of Employees[2]	Total BIA Payroll (mm)	Average Earning[3]	Percent Indian
Teachers	1,039	$ 23.1	$22,202	41%
Administrators	114	4.2	36,984	54
Counselors	103	1.9	18,605	26
Other Professionals[4]	1,082	31.2	28,839	51
Education Aides	1,469	22.6	15,365	99
Dormitory Aides and other Dormitory Personnel[5]	584	8.3	14,305	98
Clerical	496	8.2	16,522	97
Miscellaneous	1,356	35.1	25,885	86
All Types	**6,243**	**134.6**	**21,567**	**76**

[1]Includes personnel of BIA Schools. Excludes personnel of contract schools. Total salaries for 1987-88.
[2]Number of employees who are specifically recorded in BIA personnel records as having a teaching, administrative, or other type of position. Actual numbers of employees performing these functions may differ, due to the performance of dual functions by some employees, misclassification of employee positions, and other aspects of personnel record keeping.
[3]Average earnings obtained by dividing total payroll for each category of employee by the number of employees. Earnings may be received over a 12 month period -- that is, beyond the 9 1/2 month school year.
[4]Includes 1,013 professional personnel classified as "education specialists."
[5]Includes home living specialists, recreation aides and other types of dormitory personnel.

parison, in 1985 teachers represented 53.4 percent of the total personnel in U.S. public school systems.

As also shown in Table 14, the percentage of administrators in the BIA-operated school system is less than U.S. public schools. (This may be due to classification problems in the BIA personnel recording system.) The percentage of counselors is about the same in BIA-operated schools and U.S. public schools.

TABLE 14

DISTRIBUTION OF INSTRUCTIONAL PERSONNEL IN BIA-OPERATED SCHOOLS AND U.S. PUBLIC SCHOOLS , BY PERCENT

PERSONNEL TYPE	BIA Instructional Personnel[1]	U.S. Public School Personnel[2]
Teachers[3]	18.4%	53.4%
Administrators	2.0	4.6
Counselors	1.8	1.6
Education Aides[4]	26.0	7.4
Support and Other Staff	51.8	33.0

1Excludes dormitory personnel. Figures shown are for 1987.

[2]Percentages of personnel in 1985.

[3]Includes all personnel classified as teachers in BIA personnel records. Other BIA personnel not classified as teachers may perform teaching duties as part of their employment.

[4]Includes "education" aides in BIA schools and "classroom" aides in public schools.

The total of all professional categories in BIA schools (including the "other professional" category) represent 41.3 percent of all BIA instructional personnel (i.e., excluding dormitory personnel). By comparison, professional categories of personnel represent more than 60 percent of total U.S. public school employees.

Indeed, the most distinctive feature found in the structure of BIA education personnel is the high number of employees in nonprofessional categories. BIA schools have many more education aides, library assistants, clerical support, kitchen help and other personnel in nonprofessional categories of employment. As shown in Table 13, the total number of education aids in 1987 in BIA schools was 1,469-- almost all of whom were Indians. Education aides, as seen in Table 14, represented 26.0 percent of all

instructional personnel in BIA schools, as compared with 7.4 percent of all personnel in U.S. public schools.

Part of the explanation of the very high number of education aides in BIA schools is the ready availability of funds for such aides in Chapter 1 and special education programs of the Department of Education. As mentioned above, although 10 percent of students nationwide participate in Chapter 1, about 40 percent of students in BIA-funded schools currently participate in Chapter 1. Moreover, the participation of BIA-funded students in Chapter 1 was much higher in earlier years--as high as 66 percent in 1980. Personnel hired to serve large numbers of Chapter 1 students in earlier years in many cases are still employed in BIA schools. Many of the education aides today working in BIA schools are funded by Chapter 1. An additional number of education aides are funded with the special education funds coming from the Department of Education.

With its high number of aides and other categories of non-professional employees, BIA education is unusually personnel intensive. The ratio of students to total instructional (nondormitory) personnel in the BIA school system in 1987 was 4.4 to 1. By comparison, in 1985 the ratio of students to total personnel in U.S. public schools was 9.6 to 1. In other words, even excluding dormitory impacts, there are around twice as many instructional employees per student in BIA schools as in public schools.

Moreover, BIA boarding schools employ significant additional numbers of personnel to staff the dormitories. In 1987, there were 584 dormitory personnel, or a ratio of around 20 student boarders in BIA dormitories for every dormitory employee. Some additional BIA personnel may serve dormitory purposes, but are not identified as such in personnel classifications.

As a result of the large numbers of personnel per student in BIA schools, employee salaries constitute a high proportion of total operating costs. Comparisons with public schools are complicated by the many boarding students in the BIA school system. One way to avoid this complication is to limit the comparison of costs to BIA day schools. In 1982, the Interior Department's Office of Budget selected four BIA day schools (two in South Dakota, one in New Mexico and one in Arizona) and three comparable public schools (one in South Dakota and two in New Mexico) for an analysis of their costs. As shown in Table 15, the salaries of all personnel represented 73 percent of the 1982 operating costs of the four BIA schools studied, compared with 57 percent of the costs of the three comparable public schools studied.

Limited to teachers, the total teacher salaries in the four BIA schools represented 31 percent of total operating costs in 1981 and 36 percent in 1982. Reflecting the much higher ratio of teachers to total personnel in public schools, teacher salaries represented a higher proportion of operating costs in the three comparable public schools --45 percent and 47 percent of costs in the public schools in 1981 and 1982. By contrast, BIA schools incurred much higher relative costs for the nonteacher or "other" category of salaries. In 1981, these salaries represented 34 percent of total operating

TABLE 15

SALARY COSTS IN SELECTED BIA DAY AND PUBLIC SCHOOLS,
AS A PERCENT OF TOTAL OPERATING COSTS

	BIA Schools				
(FY 81):	Manderson (S.D)	Porcupine (S.D.)	Taos (N.M.)	Red Rock (AZ.)	BIA Average
Total Salaries	56%	71%	68%	68%	65%
Teachers Salaries	24	35	42	25	31
All Other Salaries	31	36	26	43	34
(FY 82):					
Total Salaries	74	76	67	72	73
Teachers Salaries	31	43	42	29	36
All Other Salaries	43	33	25	43	37
Oper. & Maint. Sal.	10	9	5	5	8

	Comparable Public Schools			
(FY 81):	Bennett (S.D.)	Naschitti (N.M.)	Newcomb (N.M.)	Public School Average
Total Salaries	46%	66%	62%	54%
Teachers Salaries	39	52	52	45
All Other Salaries	7	14	10	9
Oper. & Maint. Sal.	4	5	6	5
(FY 82):				
Total Salaries	47	67	70	57
Teachers Salaries	41	50	55	47
All Other Salaries	7	17	15	11
Oper. & Maint. Sal.	3	6	5	4

Source: Harriet Brown, "BIA Day School Expenditure Analysis," Office of Budget, U.S. Department of the Interior, March 30, 1983.

costs in the four BIA day schools, compared with 9 percent of total operating costs in the three comparable public schools. A similar circumstance was found in 1982.

These figures in some ways understate the degree to which total salary costs are higher for BIA schools, because the 73 percent figure must be applied to a base of total BIA costs per student that is much higher than the costs per student found in public schools. Using the 1982 average BIA cost for day schools of $3,603 per pupil, total salary costs of 73 percent of this figure would amount to $2,630 per BIA pupil. By comparison, using the 1982 public school average cost of $2,726 per pupil, total salary costs of 57 percent of this figure amount to only $1,554 per pupil.

Thus, if the sample schools selected in the 1982 DOI study were representative of all BIA day and comparable public schools, BIA day schools in 1982 were incurring additional salary costs above public schools of about $1,075 per pupil. Updated to 1987 price levels, this extra salary cost rises to $1,236 per pupil. These additional salary costs were almost entirely in the nonteacher or "other" category.

Figure 2 shows the effect of adding high personnel costs to the four other high-cost factors discussed previously (long transportation distances, small schools, boarding program and disadvantaged students). Assuming that unusually high personnel costs contribute around $1,200 per student, the cost differences between BIA and public schools are in major part explained. If the BIA had a personnel structure typical of public schools, and its other high-cost factors did not exist, the average costs for BIA-funded schools would be in the range of $4,242 to $4,842 per student. This range is not substantially above the 1986 average cost per student for U. S. public schools of $4,051. Excluding capital costs, the 1986 average cost of U.S. public schools was $3,752 per student. (The second figure may be the most comparable to BIA 1986 costs, because BIA new school construction was at a low level in 1986.)

One caveat should be offered with respect to the adjustments for high-cost factors shown in Figure 2 and in Table 11. Some of the adjustments may overlap and thus be counted twice. For example, the high costs due to the numerous participants in the Chapter 1 program also show up as part of the high personnel costs (many of the instructional aides are paid for with Chapter 1 funds). Hence, the adjustments in Figure 2 may to some degree contain a double counting and represent cumulatively an overadjustment.

Facilities Operation and Maintenance Costs

The personnel numbers and personnel costs shown above in Table 13 and Table 14 include only personnel involved in activities covered by direct BIA appropriations for education (and ED transfers). Under BIA funding arrangements, the operating and maintenance costs of school buildings and other school facilities are submerged in the larger budget and appropriations for all BIA facilities management. As was shown earlier in Table 5, school facility operation and maintenance is a major share

FIGURE 2

CUMULATIVE IMPACT OF HIGH-COST FACTORS IN BIA EDUCATION IN FY 1986

Full BIA Cost	=	$7,917 per student
Less adjustment for high transportation costs ($150 per student)	=	$7,767 per student
Less adjustment for very small schools of fewer than 100 students ($90 per student)	=	$7,677 per student
Less adjustment for boarding program costs ($900 to $1,500 per student)	=	$6,177 to $6,777 per student
Less adjustment for high Chapter 1 and Special Education costs ($735 per student)	=	$5,442 to $6,042 per student
Less adjustment for high personnel costs of instruction program ($1,200 per student)	=	$4,242 to $4,842 per student
Average 1985-86 U.S. public school cost per student, including capital costs	=	$4,051
Average 1985-86 U.S. public school cost per student, not including full capital costs	=	$3,752
Average 1985-86 public school cost per student, not including full capital costs		
Montana	=	$4,091
California	=	$3,543
North Dakota	=	$3,481
New Mexico	=	$3,195
Oklahoma	=	$3,146
Arizona	=	$3,093
South Dakota	=	$3,051

of the total cost of BIA school operations--$44.7 million or about 14 percent of total educational costs in 1986. (Adding in the costs of major renovations, improvements and repairs (FI&R) of school facilities, as well as the costs of new construction, the total BIA facilities costs in 1986 came to 24 percent of the total BIA education costs of all kinds.)

The general impact of high personnel costs throughout BIA education contributes significantly to an outcome already noted by a number of observers, the unusually high cost of the facilities operation and maintenance of BIA schools and other education facilities. As shown above in Table 15, salaries for operation and maintenance in the four BIA day schools selected for intensive study were 8 percent of total costs in 1982, compared with 4 percent for salaries for facilities operation and maintenance in the three comparable public schools selected for study.

Similar results were found in examining the operating costs of BIA day schools and public schools throughout New Mexico. As shown in Table 16, BIA day schools in New Mexico used 11 percent of their total 1982 budgets to cover salaries for facilities operations and maintenance, compared with 5 percent of funds used for such salaries in public schools throughout New Mexico. Overall, in New Mexico the full costs of utilities plus facilities operations and maintenance represented 25 percent of the total costs of operating BIA day schools. In comparison, the full costs of utilities plus facilities operations and maintenance in New Mexico public schools represented 12 percent of the total operating costs of such schools. Moreover, the total costs per pupil for New Mexico public schools were already much lower, less than 70 percent of the total operating costs per pupil for BIA day schools.

Table 17 shows nationwide calculations for 1981 and 1982 of the operating and maintenance costs for BIA day schools and for public schools. Because of higher personnel costs, as well as other factors that are not well understood, the 1981 per-pupil costs of facilities operations and maintenance in BIA day schools were more than three times the per-pupil costs in public schools. The difference in costs narrowed slightly in 1982, but still remained large.

More recent calculations by the Office of Construction Management found a similar cost structure for the years 1985 to 1987. In 1986 and 1987, the cost of facilities operations and maintenance for both BIA and contract schools exceeded $1,000 per pupil. By comparison, the costs of operations and maintenance in public schools averaged $426 and $441 per pupil in 1986 and 1987, respectively.

The high costs of operating and maintaining BIA school facilities are sometimes attributed to the very small size of some BIA schools. However, in 1985 the operations and maintenance costs for instructional facilities contained in all those BIA and contract schools with less than 100 students were only $3.2 million. Considering that the total BIA costs of operations and maintenance for all instructional facilities (excluding dormitory facilities) were $28.9 million in 1985, small schools could have played only a limited part in the high overall costs of BIA facilities operations and main-

TABLE 16

COMPARISON OF NEW MEXICO PUBLIC SCHOOL AND BIA DAY SCHOOL COSTS

	PERCENT OF TOTAL COSTS			
	FY 1981		FY 1982	
	N. Mex. Public	BIA Day Schools	N. Mex. Public	BIA Day Schools
Instructional Program Costs	82%	75%	80%	75%
Utilities, Operations & Maintenance Total Costs	12	25	12	25
Utilities, Operations & Maintenance Salaries	6	15	5	11
Instructional Salaries	46	36	43	38
Food Service Costs	0.1	13	0.1	5
School Administration/Costs	3	4	3	7
Utilities Costs	4	17	4	17
Transportation Costs	6	7	6	5
Total Costs Per Pupil	**$2,022**	**$4,239**	**$2,491**	**$3,603**

Source: Harriet Brown, "BIA Day School Expenditure Analysis," Office of Budget, U.S. Department of the Interior, March 30, 1983.

TABLE 17

OPERATION AND MAINTENANCE COSTS, BIA DAY SCHOOLS AND NATIONAL AVERAGES

	Average O&M Cost Per Pupil	
	FY 1981	FY 1982
BIA Day Schools	$1,004.74	$908.45
National Average	319.58	345.15

Source: Harriet Brown, "BIA Day School Expenditure Analysis," Office of Budget, U.S. Department of the Interior, March 30, 1983.

tenance. Indeed, still excluding dormitory costs, the facilities operations and maintenance costs for small schools were $940 per student, not very much more than the average $736 per student for facilities operations and maintenance for all BIA-funded schools. Besides high salary costs, other factors that contribute to BIA's high facilities costs include the poor condition of some older BIA schools, the severe climate in areas where some schools are located, and the low rate of utilization of

available space in some schools. As utilization rates decline, operations and maintenance costs do not fall correspondingly, causing these costs per pupil to rise.

Conclusion

BIA-funded education, including contract schools, obtains funds from a wide variety of budget accounts and sources. The total BIA costs of education in 1986 came to $7,917 per student. These costs were much greater than the national average cost per pupil in public schools of $4,051.

BIA faces a number of special factors that partially explain its higher costs. These factors include long transportation distances to bring students to isolated rural schools; small schools that are unable to take advantage of economies of scale; the high costs of maintaining a boarding program; and the high costs in providing education to a student body containing large numbers of students requiring various forms of special educational assistance. Estimates of the impact of these four high-cost factors are subject to many uncertainties, but they seem to explain in the range of 50 to 65 percent of BIA's higher costs.

The remaining explanation seems to lie in significant part in BIA personnel policies and staffing patterns. These policies have resulted in many more personnel per student and in a much higher proportion of nonprofessional personnel employed in BIA schools, compared with public schools. A rough estimate suggests an added cost to the BIA for additional personnel of $1,200 per BIA pupil. Given the substantial uncertainties in making such an estimate, the true figure could fall in the range of $1,000 to $1,500 per pupil (or even outside this range).

It may well be that the high numbers of personnel in BIA schools reflect the wishes of local tribal communities. The school environment for Indian students is likely to be more congenial with the addition of significant numbers of tribal adults as classroom aides and in other nonprofessional capacities. Classroom aides and other special assistants are needed for the many students who may not speak English on entering school. They generally help to bridge the transition between the tribal community and the school environment--a transition that proves difficult for many Indian students.

Tribal communities also no doubt see the schools as a significant and desirable source of employment for tribal members. Unemployment rates of 40 to 50 percent are commonplace on reservations and in some cases reach 80 percent to 90 percent. Government jobs may be the main source of employment and jobs in the schools one of the largest--if not the largest--sources of government employment. As the Federal government today contemplates workfare and other special jobs programs for reservations, the schools may be already performing this function as one part of their broader community role. Compared with all the other types of reservation jobs that government could attempt to provide, the provision of jobs in schools may be one of the more attractive options.

However, the use of BIA education funds to create additional jobs has come partly at the expense of the education program. Low salaries and other difficulties experienced by teachers and other professionals have resulted in an annual BIA turnover rate for all BIA education professionals of more than 20 percent. The BIA will find it difficult to succeed in its educational mission with a turnover rate for professionals as high as currently experienced. The building of effective BIA schools will depend above all on the recruitment and retention of skillful teachers and other professionals.

Improvements in salaries and benefits for teachers and other professionals could come from increased total budgets and resources for BIA education. If such increases are not forthcoming, tribal communities and school boards may be confronted with a difficult question of priorities. They may have to choose between a larger total number of jobs for tribal members in schools or spending more money on teachers and other professionals in hopes of raising the quality of the education received by tribal children.

CHAPTER VI

A Profile of Indian Students in Public Schools

The experiences and levels of educational achievement of Indian children enrolled in public schools are relevant to BIA education in several ways. First, many BIA students transfer to public schools, especially for the higher grades. The accomplishments and educational performance of Indian students in public schools are therefore a reflection on the preparation that some of these students received in BIA schools. Moreover, a considerable number of public school students also transfer back to BIA schools. BIA schools must address and attempt to meet the educational needs of the children that they receive from public schools. It is thus important that the BIA understand the problems and experiences of Indian students in public schools.

In general, there are many common elements to Indian education wherever it is found. Useful information and data can be obtained concerning Indian students in public schools that would not be available for BIA-operated and contract schools. In light of all these considerations, this chapter develops a profile of Indian students in public (and a few private) schools and examines the levels of achievement of these students in these schools.

Besides BIA schools, the Federal government also spends substantial amounts for the education of Indians in public schools. Table 1 shows total Federal expenditures for Indian education by Federal agency. The total spending of the Department of Education (ED) for Indian education was $338 million in 1986, substantially exceeding the 1986 total BIA educational expenditure of $257 million. Of the 1986 ED appropriations for Indian education, more than 75 percent went to public schools. Total Federal appropriations for Indian education in 1986 were $712.8 million.

Table 2 shows the levels of funding for Indian education by the Department of Education since 1970. The largest category of ED Indian educational spending is Impact Aid, which received appropriations of $226 million in 1986. Spending under Title IV of the Indian Education Act of 1972 was $62 million in 1986. Funds under this program are allocated on a per-student basis to local schools (mostly to public schools) to assist in the education of Indian children. Total spending by ED for Indian education has risen sharply from $33 million in 1970 to $335 million in 1986, reflecting a significant effort made by the Federal government to improve Indian education in public as well as BIA and contract schools.

TABLE 1

1986 FEDERAL APPROPRIATIONS DIRECTLY ALLOCATED FOR INDIAN EDUCATION, BY AGENCY

(millions of dollars)

Federal Agency	Program	1986 Appropriations for Indian Education
Department of Education	Impact Aid	$221.2
Department of Education	Title IV[1]	62.0
Department of Education	Other Programs	55.0
Department of Agriculture	School Lunches	10.4
Dept. of Health & Human Serv.	Head Start	35.8
Department of the Interior	BIA Education	235.2
Department of the Interior	Johnson O'Malley[2]	22.1
Department of Labor	Employment Training	71.1
Federal Total for Indian Education		712.8

[1]Funds provided on a per-student basis for students largely within public schools.

[2]Funds provided through BIA on a per-student basis to assist the education of Indian children in public schools.

Source: Office of Management and Budget

In 1980, the Department of Education began a comprehensive longitudinal study of American high school students (a type of long term study which the BIA perhaps should undertake but has not yet). The study involved the surveying in 1980 of more than 30,000 sophomores and 28,000 seniors in 1,015 public and private high schools across the United States. BIA-operated and contract schools were not included in the original group of schools from which the survey was drawn. No special effort was made to include Indian students in the survey. However, simply as a matter of the probabilities, in such a large sample it turned out that more than 300 of the students surveyed were Indians. Follow-up resurveys have been conducted every second year on the original students.

Around 90 percent of Indian students are attending public schools at any given time. The statistical profile of Indian students obtained from the National Longitudinal Survey provides the best available information on the general socioeconomic background and performance of Indian students in American education. Even though there may be significant differences between Indian students in public schools and

TABLE 2

DEPARTMENT OF EDUCATION FUNDS
SPECIFICALLY TARGETED FOR INDIANS

(THOUSANDS OF DOLLARS)

	TITLE IV	CHAPTER 1[1]	IMPACT AID CONSTRUCTION	IMPACT AID M & O	SPECIAL EDUCATION[1]	VOCATIONAL EDUCATION	LIBRARY RESOURCES	REHAB SERVICES[2]	SCIENCE AND MATH	OTHER[1]	TOTAL
1986	$62,000	$22,225	$7,200	$219,000	$11,500	$9,933	$1,700	$1,298	$200	$0	$335,056
1985	65,000	23,224	8,500	190,100	11,200	6,833	1,800	1,108	500	0	308,265
1984	65,900	21,913	10,100	186,100	10,600	6,889	0	715	0	0	302,217
1983	64,700	19,893	33,500	137,900	9,600	6,600	0	650	0	0	272,843
1982	74,900	18,146	8,200	122,800	9,200	5,900	0	650	0	0	239,796
1981	78,180	19,522	26,200	147,600	9,142	6,611	460	650	0	0	288,365
1980	77,430	20,194	17,000	132,592	7,970	5,930	459	0	0	0	261,575
1979	69,370	20,292	16,000	94,116	7,970	5,437	481	0	0	542	214,208
1978	57,660	17,567	10,500	87,240	2,493	5,437	453	0	0	530	181,880
1977	55,280	17,567	10,300	78,200	1,951	0	453	0	0	542	164,293
1976	55,000	17,567	4,725	59,100	1,078	0	421	0	0	533	138,424
1975	40,000	17,567	10,000	36,000	971	0	289	0	0	323	105,150
1974	40,000	17,567	11,200	30,839	240	0	125	0	0	297	100,268
1973	17,000	16,688	5,528	26,669	130	0	128	0	0	338	66,481
1972	0	17,567	2,496	24,000	120	0	120	0	0	232	44,535
1971	0	17,477	5,500	22,000	110	0	117	0	0	298	45,502
1970	0	11,702	934	20,00	56	0	61	0	0	290	33,043

[1]Set aside for BIA.
[2]Data unavailable before 1981.

Source: Office of Planning, Budget and Evaluation; U.S. Department of Education.

in BIA-funded schools, the survey is still helpful in illuminating the opportunities, needs and problems that face Indian students in BIA schools. Some of the Indian students reached in the ED survey no doubt had attended BIA schools at one time or another in the past and/or might have attended them in a year subsequent to the original survey. There are many common features that will be found in Indian education in any school system. However, it should be kept in mind that most of the data presented in this chapter is drawn from Indian students originally entered in public and private high schools in 1980 and therefore is not always applicable to the circumstances of BIA-operated and contract schools.

Family Background

Indian students, as would be expected, live in rural areas in greater proportions than the rest of the population. As shown in Table 3, 43 percent of Indian high school sophomores in public and private schools lived in rural areas in 1980. By comparison, 31 percent of white students and only 15 percent of black students lived in rural areas. The greatest underrepresentation of Indian students was in suburban areas; 37 percent of Indian sophomores in public and private high schools lived in suburban areas, compared with 54 percent for whites and 50 percent for the population as a whole.

Indians in many cases came from homes where languages other than English were spoken. However, as shown in Table 4, the Hispanic population faced greater learning obstacles in this regard than the Indian population. In 1980, fully 43 percent of Hispanic sophomores in public and private high schools came from non-English speaking homes (entirely or predominantly), while 12 percent of Indian sophomores in public and private high schools came from such homes. (This is one case where the figures for students in BIA and contract schools differ significantly from Indian students in public schools.) The white population was only 2 percent non-English speaking.

Indian populations show the highest incidence of handicaps of any group. As shown in Table 5, 11 percent of Indian sophomores were in special handicapped programs, another 36 percent were classified as having some form of handicap, and only 53 percent were classified as "not handicapped" in any way. For both blacks and Hispanics, 66 percent were classified as not handicapped.

Indian students typically come from larger families than the population as a whole. Educational studies have shown that larger family size can have an adverse impact on educational success, partly because larger size means greater competition for parental time and attention. As shown in Table 6, 42.5 percent of Indian public and private high school sophomores had four or more siblings. By comparison, only 26.2 percent of similar white high school students and 22.6 percent of Asian students had four or more siblings.

The level of education of the parents plays a key role in the educational success of the children. Those children with better educated parents learn a great deal from

TABLE 3

HOME STATUS OF 1980 HIGH SCHOOL SOPHOMORES, BY PERCENT

RACE OR ETHNIC GROUP	URBAN	SUBURB	RURAL
Hispanic	35%	46%	18%
-Mexican	29	48	23
-Cuban	25	72	3
-Puerto Rican	68	24	8
-Other Hispanic	31	44	25
AMERICAN INDIAN	**21**	**37**	**43**
Asian	32	61	7
Black	47	38	15
White	15	54	31
Other	41	41	19
All Groups	**24**	**50**	**26**

Source: U.S. Department of Education, 1980 National Longitudinal Survey

TABLE 4

HOME LANGUAGE OF 1980 HIGH SCHOOL SOPHOMORES, BY PERCENT

RACE OR ETHNIC GROUP	ONLY NON-ENG.	DOMINANT NON-ENG.	DOMINANT ENGLISH	ONLY ENG.	MISSING
Hispanic	14%	29%	27%	20%	10%
-Mexican	11	26	35	18	9
-Cuban	28	46	10	7	8
-Puerto Rican	16	34	15	20	16
-Other Hispanic	10	20	26	35	9
AMER.INDIAN	**5**	**7**	**15**	**63**	**10**
Asian	14	23	29	23	12
Black	0	1	4	88	7
White	1	1	8	86	5
Other	4	4	9	34	49
All groups	**3**	**6**	**11**	**73**	**7**

Source: U.S. Department of Education, 1980 National Longitudinal Survey

TABLE 5

HANDICAPPED STATUS OF 1980 HIGH SCHOOL SOPHOMORES, BY PERCENT

RACE OR ETHNIC GROUP	IN A HANDICAPPED PROGRAM	CONSISTENTLY HANDICAPPED	INCONSIST. HANDICAP.	NOT HAND
Hispanic	9%	4%	21%	66%
-Mexican	8	5	22	65
-Cuban	7	4	15	74
-Puerto Rican	12	5	24	60
-Other Hispanic	9	4	19	68
AMER. INDIAN	**11**	**7**	**29**	**53**
Asian	8	5	23	65
Black	8	4	22	66
White	7	4	17	72
Other	14	0	9	34
All groups	**7**	**4**	**19**	**68**

Source: U.S. Department of Education, 1980 National Longitudinal Survey

TABLE 6

NUMBER OF SIBLINGS OF 1980 HIGH SCHOOL SOPHOMORES, BY PERCENT

RACE OR ETHNIC GROUP	NO SIBLINGS	ONE	TWO	THREE	FOUR	FIVE	SIX OR MORE
Hispanic	3.90%	14.45%	22.07%	17.96%	13.61%	9.14%	18.87%
AMER.INDIAN	2.01	14.00	25.30	16.17	12.91	9.93	19.70
Asian	3.95	24.07	24.18	25.17	9.86	4.39	8.37
Black	4.36	13.39	16.98	16.99	11.26	10.72	26.30
White	3.87	22.71	27.07	20.17	10.73	6.09	9.35
Others	6.14	17.09	22.61	15.03	14.03	7.29	15.82

Source: U.S. Department of Education, 1980 National Longitudinal Survey

TABLE 7

HIGHEST LEVEL OF EDUCATION OF EITHER PARENT OF 1980 HIGH SCHOOL SOPHOMORES, BY PERCENT

RACE OR ETHNIC GROUP	LESS THAN HS GRAD	LESS THN HS GRAD ONLY	LESS THN 2 YRS VOC/TECH	2+ YRS VOC/TECH	LESS THN 2 YRS COLLEGE	2-4 YRS COLLEGE	4 YR COLLEGE DEGREE	MASTERS DEGREE	PHD MD ETC
Hispanic	14.38%	25.55%	3.71%	5.52%	5.91%	5.25%	6.92%	4.02%	2.56%
AMER. INDIAN	**10.63**	**18.35**	**6.15**	**11.17**	**4.54**	**5.03**	**9.42**	**6.13**	**2.94**
Asian	6.04	13.23	2.72	5.73	5.12	8.06	11.59	10.59	10.05
Black	10.11	23.94	3.18	6.18	5.77	6.79	6.92	3.79	2.25
White	4.94	25.85	4.25	6.48	7.71	7.85	12.61	8.67	5.61
Others	10.53	15.00	1.79	3.92	3.11	4.87	4.64	5.53	3.79

Source: U.S. Department of Education, 1980 National Longitudinal Survey

TABLE 8

INCOME LEVELS OF FAMILIES OF 1980 HIGH SCHOOL SOPHOMORES, BY PERCENT

RACE OR ETHNIC GROUP	LT $5K	$5-15K	$15-20K	$20-25K	$25-30K	$30-40K	$40-50K	$50K+
Hispanic	7.43%	14.30%	16.68%	16.91%	15.78%	10.85%	4.78%	2.31%
AMER. INDIAN	**8.87**	**11.65**	**15.23**	**19.97**	**12.70**	**10.78**	**3.89**	**2.76**
Asian	2.61	8.94	12.65	15.12	17.50	11.45	8.01	4.36
Black	10.32	19.67	17.81	14.57	11.52	6.98	3.21	1.53
White	1.72	6.58	12.68	16.68	18.48	16.76	9.36	6.13
Others	0.00	2.11	4.41	3.48	3.93	2.74	3.65	3.75

Source: U.S. Department of Education, 1980 National Longitudinal Survey

their parents and are encouraged by their parents to have higher expectations of their own future educational achievements. In this area of home environment influences, Indian students must overcome greater obstacles than the average American student. As shown in Table 7, 10.5 percent of Indian high school sophomores lived in a family where the best-educated parent had less than a high school degree, compared with only 4.9 percent of white students. Other minority students, however, faced circumstances similar to Indian students--10.1 percent of black high school sophomores and 14.4 percent of Hispanic sophomores were living in a family where the best educated parent had less than a high school diploma. The one major exception in this regard among the minorities is Asian students. Fully 32.3 percent of Asian students had at least one parent with a college diploma. Indeed, more than 10 percent of Asian students had at least one parent with a Ph.D., M.D. or other similar graduate degree.

Family income is another major factor affecting educational success of students. Higher income provides better housing conditions, travel, books, equipment and other advantages. As shown in Table 8, Indian students in public and private high schools resembled other minorities in 1980 in living in families with lower incomes. Whereas 8.9 percent of Indian sophomores came from families with incomes below $5,000, only 1.7 percent of white sophomores came from such families. At high income levels, however, 15.5 percent of white high school sophomores came from families with incomes above $40,000 compared with 6.7 percent of Indian sophomores.

Another factor that can affect educational success is the family composition. As shown in Table 9, fewer Indian high school students lived in families with two parents

TABLE 9

1980 HIGH SCHOOL SOPHOMORES LIVING IN HOUSEHOLDS WITH SPECIFIED INDIVIDUALS, BY PERCENT

RACE OR ETHNIC GROUP	LIVE WITH FATHER & MOTHER	LIVE WITH PARENT/ STEPPAR.	LIVE WITH SINGLE PARENT	LIVE WITH RELATIVE OR GUARDIAN	LIVE WITH SPOUSE OR NONRELATIVE
Hispanic	63.64%	6.95%	19.63%	5.26%	2.86%
AMER.INDIAN	**60.04**	**6.18**	**18.32**	**9.20**	**5.59**
Asian	77.92	3.43	12.97	2.32	2.41
Black	42.87	8.81	39.04	6.52	1.23
White	74.37	7.48	14.14	1.66	1.89
Others	60.36	4.34	24.23	1.92	0.65

Source: U.S. Department of Education, 1980 National Longitudinal Survey

present. Indians were much more likely, even more than other minorities, to live in a household without either parent present--14.8 percent of Indian high school sophomores, compared with 7.8 percent of black sophomores and 8.1 percent of Hispanic sophomores.

The expectations of parents also have a major influence on educational outcomes. Indian parents tend to talk with their children, to influence their children's plans, and to keep track of their whereabouts to the same degree as other parents. Indeed, as shown in Table 10, Indian students seem to talk with their parents more than other groups. Indian mothers seem to influence their high school children more than fathers, much like other minorities (62.9 percent of black students reported significant maternal influence, compared with 30.4 percent who reported significant paternal influence). Indian parents, however, do not seem to have as high expectations as other minorities for the educational achievements of their children. Only 48.2 percent of Indian fathers and 57.1 percent of Indian mothers thought their high school child should go to college--compared with 69 percent of black fathers, 71 percent of black mothers, 87 percent of Asian fathers and 91 percent of Asian mothers.

The lower expectations of parents, combined with lower educational performance and other factors, have an adverse effect on the self-esteem of Indian students. As shown in Table 11, higher percentages of Indian high school students reported themselves as perceiving life as not worthwhile, having a discipline problem, feeling unattractive or feeling unpopular.

Nevertheless, despite such attitudes, the overall objectives and goals in life for Indian students differ very little from other American population groups. Table 12 shows the percentages of high school seniors who rated various goals as "very important." Like other Americans, the great majority of Indian students are concerned to have success in marriage and family, steady work, friends, and opportunities for their children. Indian students are less concerned with having "lots of money" (although more Indian children rate this goal higher than white children) than with being a community leader, or with the particular location where they may live.

Performance in High School

The grades of Indian students in public and private high schools compare with those of other minorities in these schools--although with the conspicuous exception of high achieving Asian students. As shown in Table 13, the Indian high school students surveyed in the 1982 follow-up of the 1980 National Longitudinal Survey showed total grades as follows: A's 23.2 percent; B's 29.5 percent; C's 26.7 percent; D's 17.1 percent and F's -3.5 percent. Indian students had twice as many failing grades as whites, but fewer than blacks or Hispanics. The total percentage of A's and B's achieved by Indian students was 52.7 percent; by comparison, black students achieved 38.2 percent A's and B's; Hispanic students 49.5 percent; white students 61.5 percent; and Asian students 70.2 percent.

TABLE 10

1980 HIGH SCHOOL SOPHOMORES WHO TALKED WITH PARENTS,
WHOSE PARENTS INFLUENCED THEIR PLANS,
AND WHOSE PARENTS THOUGHT THEY SHOULD GO TO COLLEGE, BY PERCENT

RACE OR ETHNIC GROUP	TALK W/ PARENTS TWICE WEEK OR LESS	FATHER INFLUENCE PLANS ALOT	MOTHER INFLUENCE PLANS ALOT	FATHER THINKS SHOULD GO TO COLLEGE	MOTHER THINKS SHOULD GO TO COLLEGE
Hispanic	41.22%	35.14%	46.91%	56.30%	59.38%
AMERICAN INDIAN	**41.86**	**31.90**	**42.03**	**48.16**	**57.13**
Asian	37.52	49.19	48.14	87.43	91.01
Black	39.04	30.43	61.92	64.93	69.36
White	34.08	36.20	39.01	69.09	71.23
Others	35.37	41.68	36.76	64.72	69.80

Source: U.S. Department of Education, 1980 National Longitudinal Survey

TABLE 11

1980 MALE HIGH SCHOOL SOPHOMORES WHO RECEIVED GRADES OF 'B' OR BETTER
REPORTED BEING A DISCPLINE PROBLEM, OR REPORTED NEGATIVE PERCEPTIONS
RELATED TO FEELINGS OF SELF-WORTH, ATTRACTIVENESS, OR POPULARITY, BY PERCENT

RACE OR ETHNIC GROUP	'B' OR BETTER GPA	LIFE NOT WORTHWHILE	DISCIPLINE PROBLEM	UNATTRACTIVE	UNPOPULAR
Hispanic	21.1%	62.3%	54.3%	18.7%	27.9%
AMERICAN INDIAN	**30.0**	**61.1**	**63.9**	**23.5**	**27.7**
Asian	49.4	58.2	40.4	20.5	30.1
Black	20.8	59.2	46.4	16.2	21.1
White	37.2	54.5	48.8	17.9	23.0
Others	20.7	45.8	42.9	21.1	29.3
All groups	**33.0**	**56.2**	**49.4**	**18.0**	**23.7**

Source: U.S. Department of Education, 1980 National Longitudinal Survey

TABLE 12

1982 HIGH SCHOOL SENIORS WHO IN SPRING 1984 RATED SPECIFIED LIFE
GOALS AS "VERY IMPORTANT," BY PERCENT

RACE OR ETHNIC GROUP	SUCCESS IN WORK	MARRIAGE/ FAMILY	LOTS OF MONEY	FRIENDS	STEADY WORK	BEING A COMMUNITY LEADER	OPPORTUNITIES FOR CHILDREN	LIVING NEAR RELATIVES	MOVING AWAY	CORRECTING INEQUALITIES	HAVING CHILDREN	HAVING LEISURE TIME
Hispanic	89%	87%	38%	74%	89%	16%	82%	21%	11%	22%	50%	69%
AMERICAN INDIAN	**89**	**84**	**39**	**78**	**89**	**9**	**83**	**18**	**14**	**22**	**48**	**59**
Asian	90	91	35	83	83	12	79	23	5	19	50	69
Black	91	86	38	57	93	15	92	15	15	27	39	67
White	85	88	26	84	84	9	66	18	9	11	51	75
Other	82	88	40	86	79	22	84	35	16	14	48	66
All Groups	**86**	**88**	**28**	**80**	**85**	**10**	**71**	**18**	**10**	**14**	**50**	**73**

TABLE 13

COURSE GRADES BY SUBJECT MATTER OF 1980 HIGH SCHOOL SOPHOMORES WHO GRADUATED BY FALL 1982, BY PERCENT

RACE OR ETHNIC GROUP	COURSE GRADES	TOTAL	ENGL	MATH	SOC SCI	PHYS SCI	BIOL SCI	FOR LANG	BUSI-NESS	TRADE & IND	HOME ECON	ARTS	PER-SONAL	OTHER
Hispanic	A	20.9%	12.3%	13.7%	13.8%	16.3%	13.8%	27.2%	17.5%	19.0%	20.9%	36.9%	35.9%	20.8%
	B	28.6	28.3	23.5	25.6	26.4	26.2	30.6	29.9	31.9	33.9	30.3	30.0	31.4
	C	28.4	32.4	30.7	32.0	29.9	29.6	24.1	30.3	30.7	28.5	21.6	21.1	29.8
	D	17.9	22.5	24.1	23.8	22.5	24.4	14.6	17.7	15.6	13.7	8.4	10.1	15.2
	F	4.3	4.4	8.0	4.8	5.0	5.9	3.6	4.6	2.9	3.0	2.8	3.0	2.9
AMERICAN INDIAN	A	23.2	16.0	17.6	17.3	12.4	18.3	20.0	21.7	19.5	27.9	39.1	37.0	23.0
	B	29.5	29.9	24.6	25.9	29.5	30.0	28.7	27.1	32.6	33.7	30.1	31.4	34.2
	C	26.7	31.9	27.0	30.1	26.4	27.8	27.8	29.2	31.6	26.7	18.9	19.4	25.3
	D	17.1	19.4	23.4	23.9	25.6	18.9	17.4	17.8	14.7	9.9	9.3	9.5	14.8
	F	3.5	2.8	7.4	2.8	6.2	5.0	6.1	4.2	1.6	1.7	2.6	2.6	2.7
Asian	A	39.7	30.5	32.3	34.7	27.6	32.5	44.2	38.2	35.9	42.7	55.2	55.3	42.5
	B	30.5	34.9	30.0	30.1	34.3	28.2	31.5	30.0	29.4	24.7	29.6	26.6	32.0
	C	19.5	23.6	21.8	24.4	25.3	23.7	15.3	20.0	22.5	21.3	10.9	12.6	17.0
	D	8.6	9.6	13.7	9.0	11.3	12.4	8.0	9.4	9.5	8.4	3.0	4.5	6.9
	F	1.6	1.4	2.1	1.8	1.6	3.1	0.9	2.3	2.6	2.8	1.2	1.0	1.6
Black	A	18.0	11.0	10.5	13.7	12.1	11.7	18.7	13.3	18.8	19.1	34.3	32.8	18.7
	B	28.2	27.6	21.9	26.1	25.5	23.6	26.4	30.6	29.7	35.2	33.2	31.2	29.8
	C	29.6	34.5	31.0	32.3	34.6	32.2	28.5	29.6	32.0	28.2	20.0	22.5	30.3
	D	19.6	22.4	28.7	23.2	23.3	26.0	21.2	21.6	15.8	13.8	9.6	10.5	17.4
	F	4.6	4.6	7.9	4.8	4.5	6.5	5.2	5.0	3.6	3.7	2.8	2.9	3.7
White	A	27.3	19.6	18.6	22.1	20.3	20.2	28.0	24.5	23.2	30.3	48.9	41.9	28.4
	B	34.2	36.1	30.6	33.3	35.2	31.6	33.6	35.7	36.1	38.7	31.2	34.2	35.2
	C	25.2	29.1	29.6	28.0	29.2	30.9	25.0	26.7	27.7	22.3	14.1	17.3	24.9
	D	11.4	13.3	17.8	14.6	13.3	14.9	11.3	11.2	11.4	7.6	4.7	5.4	10.1
	F	1.9	1.9	3.5	2.0	2.0	2.4	2.2	2.0	1.6	1.1	1.1	1.3	1.4
Others	A	17.8	5.9	3.1	1.9	5.9	.	13.6	18.2	60.0	40.0	52.8	29.1	15.6
	B	34.7	27.9	25.0	52.8	17.6	22.2	13.6	31.8	33.3	40.0	30.6	47.3	40.0
	C	26.1	41.2	37.5	30.2	11.8	27.8	40.9	22.7	6.7	20.0	8.3	18.2	22.2
	D	17.6	23.5	21.9	15.1	35.3	38.9	22.7	27.3	.	.	8.3	3.6	22.2
	F	3.8	1.5	12.5	.	29.4	11.1	9.1	.	.	.	.	1.8	.

Source: U.S. Department of Education, 1980 National Longitudinal Survey

Grades achieved by Indian students in particular subject areas tended to follow a similar pattern. In mathematics, for example, 7.4 percent of Indian students received a failing grade, compared with 8.0 percent of Hispanic students, 7.9 percent of black students, 3.5 percent of white students and 2.1 percent of Asian students. Grades of A or B in mathematics were received by 42.2 percent of Indian high school students, a higher percentage than blacks or Hispanics, but lower than whites and Asians. Indian students achieved the poorest grades in the physical sciences, slightly higher than black grades in this field, but below Hispanics, whites and Asians. Only 12.4 percent of Indian students received A's in their courses in the physical sciences, below their grades achieved in any other subject.

Indian students earned the highest grades in art and home economics--39.1 percent and 27.9 percent receiving grades of A in these subjects, respectively. Students in all population groups, however, did well in these subjects. Indian grades were slightly higher than blacks and Hispanics, but again lagged behind whites and Asians.

Comparisons of grades may be difficult to make, because grading standards may vary substantially from school to school or from classroom to classroom. A grade of C from one teacher may require knowledge and understanding of the subject matter that would be sufficient to earn a grade of A from another teacher. Standardized tests have been developed to try to offer a more uniform basis for comparison of student learning and knowledge. In Table 14, results of the Scholastic Aptitude Test (SAT) are shown for various racial and ethnic groups over the years from 1975-76 to 1984-85 (unlike previous tables in this chapter, Table 14 includes results not only from public and private schools, but also from those Indian students attending BIA and contract schools who took the SAT's).

Indian SAT scores show a pattern in Indian educational performance similar to that already seen in the grades of Indian students. Indian SAT scores are higher than those of blacks and Hispanics, but well below the SAT scores of whites and Asians and well below the national averages. In 1984-85 the average Indian SAT score was 392 on the verbal part of the test, compared with a national verbal average of 431. The average Indian SAT score for mathematics was 428, compared with a national mathematical SAT average of 475. Relative to national averages, Indian students did slightly better on the verbal part of the SAT. In 1984-85 they fell 40 points behind the national average for the verbal SAT, compared with 47 points behind for the national mathematical average.

One disturbing element shown in Table 14 is the slow rate of improvement of Indian SAT scores. From the 1975-76 to the 1984-85 school year, blacks improved their mathematical SAT results by 22 points, Mexican Americans by 16 points and Puerto Ricans by 8 points compared with a gain of only 8 points by Indians. Indian verbal SAT scores rose by only 4 points over this decade, compared with a rise of 14 points for blacks, 11 points for Mexican Americans and 4 points for Puerto Ricans.

TABLE 14

SCHOLASTIC APTITUDE TEST (SAT) SCORE AVERAGES, BY RACIAL/ETHNIC GROUP, 1975-76 TO 1984-85

RACE OR ETHNIC GROUP	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85
SAT-VERBAL										
All Students	431	429	429	427	424	424	426	425	426	431
White	451	448	446	444	442	442	444	443	445	449
Black	332	330	332	330	330	332	341	339	342	346
Mexican-American	371	370	370	370	372	373	377	375	376	382
Puerto Rican	364	355	349	345	350	353	360	350	358	368
Asian-American	414	405	401	396	396	397	398	395	398	404
AMERICAN INDIAN	**388**	**390**	**387**	**386**	**390**	**391**	**388**	**388**	**390**	**392**
Other	410	402	399	393	394	388	392	386	388	391
SAT-MATH										
All Students	472	470	468	467	466	466	467	468	471	475
White	493	489	485	483	482	483	483	484	487	491
Black	354	357	354	358	360	362	366	369	373	376
Mexican-American	410	408	402	410	413	415	416	417	420	426
Puerto Rican	401	397	388	388	394	398	403	403	405	409
Asian-American	518	514	510	511	509	513	513	514	519	518
AMERICAN INDIAN	**420**	**421**	**419**	**421**	**426**	**425**	**424**	**425**	**427**	**428**
Other	458	457	450	447	449	447	449	446	450	448

Source: College Entrance Examination Board, National Report on College Board Seniors, 1985 (October 1986).

The SAT is taken by only a limited number of Indian high school students, who are unlikely to be representative of all Indian students. However, other testing shows similar outcomes. Table 15 shows scores achieved by students given a special set of tests as part of the National Longitudinal Study. This test included high school sophomores of all ability levels and degrees of educational motivation and interest. Like Hispanics and blacks, Indians tended to fall well below national averages. Of these three minorities, however, Indian students achieved higher test scores than Hispanics and blacks on all tests except civics. Indian students achieved test scores well below Asian students, who exceeded national norms in every case but one, and who exceeded the test results of white students for mathematics and writing.

TABLE 15

NUMBER OF CORRECT ANSWERS OF HIGH SCHOOL SOPHOMORES IN TESTS ADMINISTERED BY THE NATIONAL LONGITUDINAL STUDY (FIGURE SHOWN IS TOTAL NUMBER OF CORRECT ANSWERS)

RACE OR ETHNIC GROUP	VOCABULARY (21 QUESTIONS)	READING (19 QUESTIONS)	MATHEMATICS (28 QUESTIONS)	SCIENCE (20 QUESTIONS)	WRITING (17 QUESTIONS)	CIVICS (10 QUESTIONS)
Hispanic	5.919	4.951	6.352	6.583	5.706	3.445
AMERICAN INDIAN	6.638	5.597	6.848	7.760	6.684	3.313
Asian	9.485	7.465	13.932	9.472	10.178	4.676
Black	5.025	4.466	5.443	5.545	5.528	3.675
White	10.236	8.084	12.355	10.314	9.742	5.098
All Groups	9.098	7.213	10.828	9.304	8.776	4.726

Source: U.S. Department of Education, 1980 National Longitudinal Survey

Test score results partly reflect the difficulty and strength of the curriculum selected by each student. Indian students tend to shy away from the more rigorous academic programs, even compared with other disadvantaged minorities. As shown in Table 16, only 12.8 percent of Indian sophomores in public and private high schools were enrolled in 1980 in academic programs compared with 15.5 percent of blacks, 18.6 percent of Hispanics, 27.8 percent of whites and 47.6 percent of Asians. By contrast, Indian students are more likely to be enrolled in vocational, agricultural and general education programs. Indeed, when the lower academic content of Indian high school courses is considered, Indian test scores are in some ways better than might be expected.

TABLE 16

1980 HIGH SCHOOL SOPHOMORES ENROLLING IN HIGH SCHOOL PROGRAM AREAS, BY PERCENT

RACE OR ETHNIC GROUP	GENERAL PROGRAM	ACADEMIC PROGRAM	VOCATIONAL GENERALIST	AGRI-CULTURE PROGRAM	BUSINESS PROGRAM	DISTRIB. EDUCATION PROGRAM	HEALTH PROGRAM	HOME ECONOMICS PROGRAM	TECH,TRADE INDUSTRY PROGRAM
Hispanic	33.0%	18.6%	2.5%	2.0%	24.9%	2.6%	1.1%	0.8%	14.5%
-Mexican	33.7	16.6	1.6	2.0	26.9	2.5	0.5	1.3	14.9
-Cuban	40.2	24.8	1.7	0.0	17.3	3.2	0.3	0.7	11.8
-Puerto Rican	33.3	19.0	2.9	0.0	23.4	0.8	0.1	0.0	20.5
-Other Hispanic	30.1	21.1	4.2	3.1	23.2	3.2	2.8	0.4	11.9
AMER. INDIAN	33.3	12.8	3.9	7.7	20.8	2.1	0.2	0.7	18.5
Asian	16.2	47.6	1.1	1.0	20.7	0.4	0.1	0.5	12.3
Black	32.8	15.5	2.6	1.5	24.9	2.7	1.8	1.9	16.3
White	21.4	27.8	2.6	3.7	29.0	1.8	0.5	0.8	12.3
All Groups	23.7	25.6	2.6	3.3	28.0	2.0	0.7	1.0	13.0

Source: U.S. Department of Education, 1980 National Longitudinal Survey

The lack of enrollment by Indian students in the more demanding high school courses is illustrated by their relatively small numbers in science courses. As shown in Table 17, 28.1 percent of Indian students took either no science course at all in their high school career or only one science course--compared with 13.1 percent for Asians, 20.2 percent for whites, 20.6 percent for blacks and 23.3 percent for Hispanics. Showing the interest and motivation to take four or more science courses were 15.1 percent of Hispanic students, 18.7 percent of Indians, 19.2 percent of blacks, 22.9 per-

TABLE 17

THE NUMBER OF SCIENCE COURSES ATTEMPTED, BY PERCENT, AND THE AVERAGE SCIENCE GRADE POINT AVERAGE FOR 1980 HIGH SCHOOL SOPHOMORES WHO GRADUATED IN 1982

RACE OR ETHNIC GROUP	NUMBER SCIENCE COURSES ATTEMPTED 0	1	2	3	4	5	6	AVERAGE SCIENCE GPA
Hispanic	2.9%	20.4%	38.2%	23.5%	10.6%	2.9%	1.6%	2.07
AMERICAN INDIAN	3.6	24.5	30.2	23.0	15.1	2.2	1.4	2.13
Asian	2.0	11.1	23.7	28.1	23.3	7.5	4.3	2.69
Black	1.1	19.5	35.5	24.7	12.2	3.7	3.3	2.08
White	1.9	18.3	32.4	24.5	16.3	4.4	2.2	2.47
Others	0	18.2	27.3	9.1	36.4	0	9.1	1.69

Source: U.S. Department of Education, 1980 National Longitudinal Survey

cent of whites and 35.1 percent of Asians. The grade point average of Indian students in science courses was 2.13, below the national average grade point in science of 2.38.

A lower commitment to educational achievement among Indian students was also shown in their time spent on homework. As shown in Table 18, almost 10 percent of Indian students reported that they did not do any homework, even though it was assigned. Fully 35.9 percent of Indian sophomores in high school reported that they did less than one hour of homework per week--compared with 28.2 percent of Hispanic students, 24.8 percent of black students, 19.2 percent of white students, and 13.5 percent of Asian students.

TABLE 18

AMOUNT OF HOMEWORK DONE BY 1980 HIGH SCHOOL SOPHOMORES, BY PERCENT

RACE OR ETHNIC GROUP	NONE ASSIGNED	ASSIGNED BUT DON'T DO ANY	LESS THAN 1 HR/WK	1 - 3 HR/WK	3 - 5 HR/WK	5 - 10 HR/WK	10 + HR/WK
Hispanic	3.79%	6.76%	17.62%	31.51%	22.06%	13.97%	4.29%
AMERICAN INDIAN	4.82	9.70	21.42	24.55	18.33	18.29	2.90
Asian	1.42	2.84	9.23	17.74	19.82	31.25	17.71
Black	3.14	3.80	17.89	30.96	20.17	17.90	6.13
White	2.03	4.63	12.51	27.24	25.40	21.85	6.33
Others	1.58	5.80	14.59	28.64	26.30	10.24	12.85
All Groups	2.41	4.84	13.87	28.10	24.21	20.40	6.17

Source: U.S. Department of Education, 1980 National Longitudinal Survey

A lower Indian commitment to schooling--whatever the social and other causes--is also shown in the very high dropout rate of Indian public and private high school students, which substantially exceeds that of other disadvantaged minorities. As shown in Table 19, fully 29.2 percent of the Indian sophomores in high school who were surveyed in 1980 had dropped out of school by 1982, when they were resurveyed for the National Longitudinal Study. By comparison, 18.0 percent of Hispanics, 17.0 percent of blacks, 12.2 percent of whites and 3.1 percent of Asians had dropped out. Unlike other racial or ethnic groups, female Indian students were even more likely than male Indian students to drop out of public and private high school.

TABLE 19

PERCENT OF 1980 HIGH SCHOOL SOPHOMORES WHO DROPPED OUT BEFORE GRADUATION

RACE OR ETHNIC GROUP	MALE	FEMALE	TOTAL
AMER. INDIAN & ALASKAN NATIVE	27.2%	31.8%	29.2%
Hispanic	18.1	18.0	18.0
Black	20.3	14.1	17.0
White	13.0	11.5	12.2
Asian	3.5	2.7	3.1
All Groups	14.7	12.6	13.6

Source: U.S. Department of Education, 1980 National Longitudinal Survey

Even when Indians remain in school, they have greater problems with attendance in the classroom than other groups. Table 20 shows that 48 percent of Indian students who graduated in 1982 reported that they had cut classes. Schools reported problems with poor attendance and cutting classes for 65 percent and 75 percent, respectively, of Indian high school graduates--higher than the figures for any other group. As shown in Table 21, 14 percent of Indian high school graduates had been suspended at one time or another for disciplinary reasons. A total of 8 percent of Indian graduates indicated that they had had serious trouble with the law.

TABLE 20

PERCENTAGES OF 1982 HIGH SCHOOL GRADUATES WHO REPORTED ATTENDANCE PROBLEMS

RACE OR ETHNIC GROUP	STUDENT CUT CLASSES	SCHOOL HAS PROBLEM WITH POOR ATTENDANCE	SCHOOL HAS PROBLEM WITH CUTTING CLASS
Hispanic	41%	64%	70%
AMERICAN INDIAN	48	65	75
Asian	39	51	69
Black	33	62	75
White	40	55	67
Others	43	55	81
All Groups	39	57	68

Source: U.S. Department of Education, 1980 National Longitudinal Survey

TABLE 21

PERCENTAGES OF 1982 HIGH SCHOOL GRADUATES WHO REPORTED DISCIPLINARY OR LEGAL PROBLEMS

RACE OR ETHNIC GROUP	HAD DISCIPLINE PROBLEMS	SUSPENDED ACADEMIC REASONS	SUSPENDED DISCIPLINE REASONS	SERIOUS TROUBLE WITH LAW
Hispanic	19%	7%	14%	6%
AMERICAN INDIAN	17	4	14	8
Asian	16	5	7	2
Black	18	5	13	2
White	11	3	10	4
Others	27	10	15	5
All Groups	13	4	11	4

Source: U.S. Department of Education, 1980 National Longitudinal Survey

The negative attitudes of many Indian students towards schooling are reflected in their assessments of their teachers. Indian students tend to think worse of their teachers than any other group. Table 22 shows the level of unhappiness of Indian students with their teachers--how many Indian students believe that "few or none" of their teachers show desirable characteristics. Thus, 28 percent of Indian students believed that few or none of their teachers made clear presentations; 46 percent

TABLE 22

PERCENTAGES OF 1980 HIGH SCHOOL SOPHOMORES WHO REPORTED FEW OR NONE OF THEIR TEACHERS DISPLAYED SELECTED INSTRUCTIONAL CHARACTERISTICS

RACE OR ETHN.GRP.	MAKE CLEAR PRESEN-TATIONS	WORK STUDENTS HARD	DON'T TALK OVER YOUR HEAD	PATIENT & UNDER-STANDING	RETURN STUDENT WORK PROMPTLY
Hispanic	26%	37%	41%	38%	39%
AMERICAN INDIAN	28	46	43	44	40
Asian	20	34	34	25	35
Black	29	40	45	41	45
White	21	39	29	34	37
Others	32	20	43	44	40

Source: U.S. Department of Education, 1980 National Longitudinal Survey

believed that few or none of their teachers worked students hard; 43 percent perceived that few or none of their teachers refrained from talking over their head; 44 percent considered that few or none of their teachers were patient and understanding; and 40 percent observed that few or none of their teachers returned student work promptly.

One area in which Indian students displayed more motivation and interest than other high school students was extra-curricular activities. A total of 90.2 percent of Indian high school seniors in 1980 reported having participated in some form of extra-curricular activity. As shown in Table 23, fully 44.6 percent of these high school seniors had participated in varsity sports, a rate of participation significantly higher than any other population group. Indian interest in extra-curricular activities extended to academic areas as well. As seen in Table 24, 18.2 percent of Indian high school seniors in 1980 were involved with debate or drama, while 21.6 percent were involved with student government.

TABLE 23

PERCENTAGES OF 1980 HIGH SCHOOL SENIORS WHO PARTICIPATED IN SPORTS OR MUSIC-RELATED ACTIVITIES IN HIGH SCHOOL

RACE OR ETHNIC GROUP	ANY ACTIVITY	SPORTS			MUSIC-RELATED ACTIVITIES			
		ANY	VARSITY	OTHER	ANY	CHEERLDR	BAND	CHORUS/ DANCE
Hispanic	86.06%	48.75%	33.11%	39.03%	29.11%	10.99%	11.35%	16.24%
-Mexican	88.69	49.46	34.06	39.43	28.28	11.52	10.36	15.87
-Cuban	89.02	41.78	30.69	29.83	23.61	9.78	4.40	12.89
-Puerto Rican	75.84	47.62	27.77	40.33	30.83	11.27	8.35	21.16
-Other Hispanic	83.36	49.19	33.46	39.79	31.50	10.03	16.00	16.05
AMERICAN INDIAN	90.16	63.57	44.57	53.94	41.81	23.85	14.55	25.14
Asian	86.31	53.04	33.57	41.72	37.57	15.10	16.37	21.57
Black	90.38	53.45	35.82	44.18	44.92	17.37	16.91	29.14
White	88.36	50.64	33.84	40.91	35.78	14.42	16.13	19.63
Other	95.17	74.87	53.11	62.32	33.64	12.56	14.17	30.27
All Groups	88.47	51.08	34.17	41.37	36.56	14.66	15.94	20.65

Source: U.S. Department of Education, 1980 National Longitidinal Survey

Postsecondary Education

After graduation from high school, Indian students are less likely than other population groups to enter postsecondary education. As shown in Table 25, 61.1 percent of Indian high school seniors in 1979-80 had not entered any institution of postsecon-

TABLE 24

PERCENTAGES OF 1982 HIGH SCHOOL SENIORS WHO PARTICIPATED IN ACADEMIC TYPE ACTIVITIES OR IN NEWSPAPER/POLITICAL ACTIVITIES IN HIGH SCHOOL

RACE OR ETHNIC GROUP	ANY ACTIVITY	ACADEMIC TYPE CLUBS: ANY	DEBATE/ DRAMA	HONORARY	SUBJECT MATTER	OTHER ACADEM.: ANY	SCH PAPER	STUDENT GOV'T
Hispanic	86.05%	32.63%	11.28%	11.31%	26.05%	30.98%	14.18%	16.73%
-Mexican	88.69	33.71	9.57	11.73	26.01	30.76	14.39	17.53
-Cuban	89.02	38.49	4.17	12.05	33.92	28.46	16.19	15.44
-Puerto Rican	75.84	21.98	14.52	12.61	15.18	35.94	21.01	16.53
-Other Hispanic	83.36	32.73	15.34	9.81	28.24	30.31	10.93	15.38
AMER. INDIAN	90.16	32.65	18.22	15.18	26.14	41.03	27.24	21.64
Asian	86.31	38.20	12.94	19.65	28.34	38.05	23.33	22.07
Black	90.38	34.54	14.44	13.99	28.03	37.42	18.25	22.24
White	88.36	34.24	15.56	17.76	23.42	37.55	20.92	17.53
Other	95.17	29.2	42.92	25.56	14.88	39.31	13.90	25.06
All Groups	88.47	34.22	15.14	16.98	24.18	37.21	20.30	18.16

Source: U.S. Department of Education, 1980 National Longitudinal Survey

TABLE 25

POSTSECONDARY STATUS IN OCT. 1980 FOR HIGH SCH. SENIORS IN 1979-80, BY PERCENT

RACE OR ETHNIC GROUP	PART-TIME STUDENT: PRIV. 4-YR	PUB. 4-YR	PUB. 2-YR	OTHER	FULL-TIME STUDENT: PRIV. 4-YR	PUB. 4-YR	PUB. 2-YR	OTHER	NOT STUDENT
Hispanic	0.29%	1.10%	5.32%	0.46%	5.32%	11.16%	15.00%	2.46%	58.88%
-Mexican	0.42	0.96	4.76	0.68	3.44	9.60	15.37	2.54	62.24
-Cuban	0.00	0.44	8.38	0.00	17.98	11.22	28.45	1.37	32.16
-Puerto Rican	0.36	0.88	0.97	0.33	7.68	20.02	5.71	1.91	62.14
-Other Hispanic	0.03	1.64	7.44	0.11	5.95	11.46	14.60	2.71	56.04
AMER. INDIAN	0.14	1.13	3.44	0.00	3.79	12.12	15.07	2.19	61.12
Asian	0.18	5.16	7.57	0.03	13.09	32.01	13.99	5.06	22.91
Black	0.64	1.48	1.40	0.29	7.70	19.11	9.65	3.29	56.45
White	0.53	1.44	3.46	0.42	10.81	19.48	13.07	3.31	47.48
Other	0.00	0.00	0.00	0.00	0.00	5.77	2.75	0.62	90.86
All Groups	0.52	1.46	3.34	0.39	9.99	18.94	12.68	3.24	49.43

Source: U.S. Department of Education, 1980 National Longitudinal Survey

dary education by October 1980. By comparison, 56.5 percent of blacks, 47.5 percent of whites and 22.9 percent of Asians had not entered any postsecondary institution. Of Indian students who had entered postsecondary education, they were less likely to enter private institutions and more likely to enter public institutions.

However, Indians are more likely than other groups to delay their education. For all students who had achieved at least some postsecondary education by 1984, Table 26 shows when these 1980 high school graduates actually entered postsecondary education. Thus, only 60.3 percent of all Indian students who would eventually enter postsecondary education at some time in their first four years out of school did so in the first semester. Even three semesters after graduating in 1980, only 74.6 percent of those Indians destined by 1984 for some postsecondary education had begun this process of education.

TABLE 26

CUMULATIVE PERCENTAGE DISTRIBUTION FOR ENTRY INTO POSTSECONDARY EDUC. FOR 1980 HI. SCH. GRADUATES WHO ENTERED POSTSECONDARY INSTITUTIONS BY FEB. 1984

(EIGHT SEMESTERS AFTER HIGH SCHOOL GRADUATION)

RACE OR ETHNIC GROUP	NUMBER OF SEMESTERS AFTER HIGH SCHOOL						
	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN
Hispanic	68.08%	74.81%	83.82%	87.57%	95.27%	95.98%	97.93%
-Mexican	63.59	71.33	82.47	86.83	94.41	95.11	97.09
-Cuban	77.72	81.82	87.34	90.37	97.68	97.68	100.00
-Puerto Rican	69.93	73.53	79.36	86.47	95.09	95.09	99.16
-Other Hispanic	74.34	80.68	87.12	88.68	96.45	97.64	98.75
AMERICAN INDIAN	60.33	63.61	74.59	77.09	88.81	91.39	94.80
Asian	84.36	87.15	91.60	92.84	96.70	97.65	99.39
Black	67.67	73.88	83.86	86.61	95.50	96.20	98.96
White	76.48	80.31	87.98	89.88	96.17	96.76	99.07
All Groups	74.73	78.92	86.82	88.95	95.92	96.60	98.99

Source: U.S. Department of Education, 1980 National Longitudinal Survey

Reflecting the delayed entrance of many Indian students into postsecondary education, cumulative Indian rates of participation in postsecondary education improved significantly in the years after graduation. In Table 27, the rate of participation in postsecondary education is shown for Indian students four years after graduation from high school. Although Indian students had lower rates initially, by four years after graduation their rate of participation in postsecondary education exceeded other minorities, except Asians and Cubans. By the end of four years 62.6 percent of

TABLE 27

PERCENTAGES OF 1980 HIGH SCHOOL GRADUATES WHO HAD ENROLLED IN VOCATIONAL/ TECHNICAL SCHOOLS, TWO-YEAR/JUNIOR COLLEGES, FOUR-YEAR COLLEGES AND UNIVERSITIES, OR ANY TYPE OF POSTSECONDARY PROGRAM BY FEBRUARY 1984

RACE OR ETHNIC GROUP	ANY PSE	ANY VOC/TECH	ANY 2-YR COLLEGE	ANY 4-YR COLLEGE
Hispanic	57.10%	7.44%	34.56%	30.48%
-Mexican	56.59	7.97	35.73	28.00
-Cuban	83.09	8.32	52.12	47.70
-Puerto Rican	51.80	6.18	16.91	40.37
-Other Hispanic	54.64	6.57	34.43	28.89
AMERICAN INDIAN	62.62	8.64	35.44	33.31
Asian	89.50	9.69	34.97	68.88
Black	61.73	9.06	23.21	42.66
White	66.97	7.49	28.13	46.53
All Groups	65.75	7.64	27.89	45.15

Source: U.S. Department of Education, 1980 National Longitudinal Survey

Indian graduates had entered postsecondary education. By comparison, 57.1 percent of Hispanics, 61.7 percent of blacks, 67.0 percent of whites and 89.5 percent of Asians had had some postsecondary education within four years of their graduation from high school in 1980. Entering the military plays a greater part in the postsecondary experiences of Indian high school graduates, as compared with any other population group. As shown in Table 28, although higher percentages of blacks and Hispanics

TABLE 28

HIGH SCHOOL ROTC, PHYSICAL EXAM, AND ENLISTMENT PERCENTAGES FOR 1980 HIGH SCHOOL SOPHOMORES

RACE OR ETHNIC GROUP	TOOK HS ROTC	TOOK PHYSICAL EXAM	QUALIFIED ON PHYS EXAM	ENLISTED IN THE ARMY	NAVY	USAF	USMC
Hispanic	4.0%	8.8%	6.8%	2.6%	0.9%	1.2%	0.9%
AMERICAN INDIAN	2.7	7.8	7.5	3.5	0.7	2.3	0.7
Asian	1.6	5.5	4.5	1.4	0.6	0.5	0.3
Black	8.5	8.7	6.9	3.1	0.7	0.7	1.0
White	1.2	4.7	4.3	1.1	0.7	0.6	0.4
Others	6.9	0.0	0.0	0.0	0.0	0.0	0.0

Source: U.S. Department of Education, 1980 National Longitudinal Survey

took physical exams for the military, a higher percentage of Indians passed their exams and were rated as qualified. Fully 3.5 percent of Indian graduates of public and private high schools enlisted in the Army and 2.3 percent in the Air Force, higher percentages than any other population group. Total military enlistments represented 7.2 percent of Indian high school graduates--compared with 5.6 percent for Hispanics, 5.5 percent for blacks, 2.8 percent for whites, and 2.8 percent for Asians.

As counted by the 1980 U.S. Census, the total population of 1.37 million American Indians represented 0.6 percent of the total U.S. population of 226.5 million. Table 29 shows that in the fall of 1984 there were 82,672 Indians enrolled in American institutions of higher education, representing 0.7 percent of the total students enrolled in all such institutions. Thus, the overall percentage of Indian enrollment in higher education was higher than the percentage of Indians in the population as a whole. This high rate of enrollment in higher education in part reflects past government efforts to provide scholarships and other assistance to Indian students.

TABLE 29

TOTAL ENROLLMENT IN INSTITUTIONS OF HIGHER EDUCATION, BY RACE/ETHNICITY OF STUDENT AND BY TYPE AND CONTROL OF INSTITUTION: UNITED STATES, FALL 1984

TYPE & CONTROL OF INSTITUTION	TOTAL ENROLLMENT	RACE/ETHNICITY					
		WHITE, NON-HISPANIC	BLACK, NON-HISPANIC	HISPANIC	ASIAN OR PACIFIC ISLANDER	AMERICAN INDIAN/ ALASKAN NATIVE	NONRES. ALIEN
All Institutions	12,161,778	9,766,845	1,069,885	528,786	381,746	82,672	331,844
Universities	2,863,828	2,404,292	142,885	70,331	93,071	12,497	140,752
Other 4-yr Institutions	4,786,967	3,858,385	470,056	170,882	123,694	24,984	138,966
2-year Institutions	4,510,983	3,504,168	456,944	287,573	164,981	45,191	52,126
Public Institutions	9,424,911	7,524,802	841,336	452,514	317,454	71,642	217,163
Universities	2,135,208	1,816,758	99,591	48,554	65,341	10,518	94,446
Other 4-yr Institutions	3,024,653	2,391,006	324,873	126,146	89,755	19,050	73,823
2-year Institutions	4,265,050	3,317,038	416,872	277,814	162,358	42,074	48,894
Private Institutions	2,736,867	2,242,043	228,549	76,272	64,292	11,030	114,681
Universities	728,620	587,534	43,294	21,777	27,730	1,979	46,306
Other 4-yr Institutions	1,762,314	1,467,379	145,183	44,736	33,939	5,934	65,143
2-year Institutions	245,933	187,130	40,072	9,759	2,623	3,117	3,232

Source: U.S. Department of Education

Substantial Indian enrollment in higher education does not necessarily translate, however, into the completion of college and the earning of a bachelor's degree. In 1980-81, Indians earned only 3,593 bachelor's degrees, or 0.4 percent of all such degrees. The largest numbers of Indians received bachelor's degrees in business and management (636), followed by education (569) and social sciences (474). Nationwide, there were 195 Indian bachelor's degrees in engineering, 65 in the physical sciences and only 18 in mathematics in 1980-81.

American Indians received 0.2 percent of all Ph.D.s in 1983-84, although they represented 0.6 percent of the population. Indians received 0.5 percent of all education Ph.D.s, 0.1 percent of mathematics and physical science Ph.D.s, and 0.1 percent of humanities Ph.D.s. Finally, representing the last step of the educational ladder, as shown in Table 30, there were 1,307 Indian faculty members in American institutions of higher education, representing 0.3 percent of all faculty members. There were 231 Indian full professors, or 0.2 percent of all full professors.

Conclusion

According to the 1980 Census, the poverty rate on Indian reservations was 41 percent. Off-reservation Indians had a lower poverty rate of 22 percent, but still much higher than the overall U.S. poverty rate of 12 percent. Fully 14 percent of Indian households on reservations and 7 percent of households off-reservations earned less than $2,500, compared with a U.S. figure for all races of 5 percent. Among reservation Indians 25 and older, 27 percent in 1980 had less than an eighth grade education compared with 10 percent for the U.S. population over 25 as a whole. In short, American Indians both on and off reservations represent a minority population facing many obstacles to high educational attainment.

Indians have also been subject to many cultural disruptions, in many cases compressing these experiences into the short space of the last century. Only one hundred years ago many Indians in the West were living in tribal societies that in most respects had been little touched by Western science and other Western influences. Today, the descendants of these tribal members, the contemporary Indian student of both public and BIA-operated school systems, must master the knowledge and social practices of mainstream American society, while many are also seeking to keep alive important elements of the knowledge and the practices of traditional Indian life. The complex demands of these two ways of living place an extra burden on many Indian students, as Indian students are involved in the difficult process of resolving for themselves conflicts between traditional and modern culture.

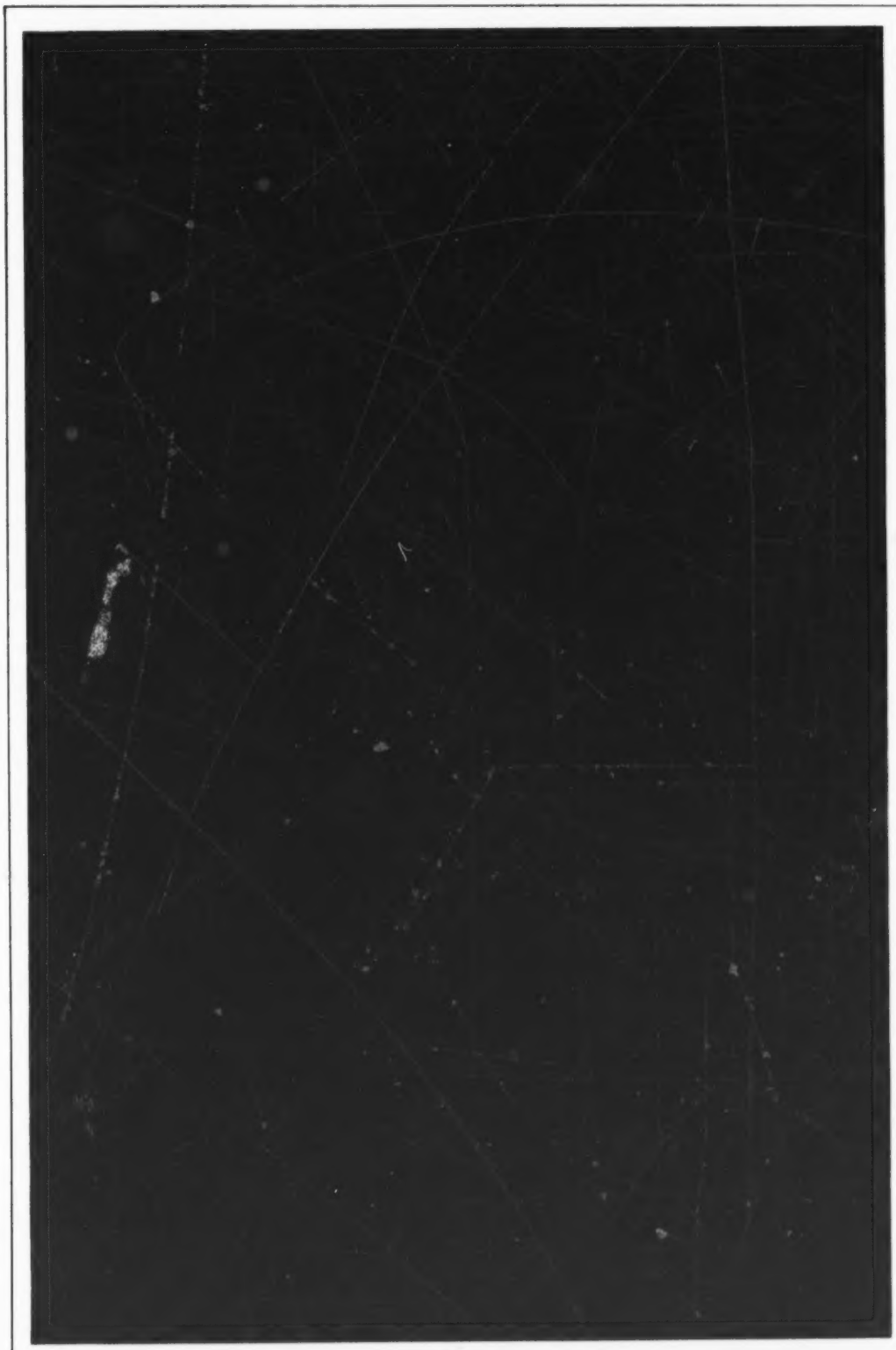
TABLE 30

FULL-TIME INSTRUCTIONAL FACULTY IN INSTITUTIONS OF HIGHER EDUCATION, BY RACIAL/ETHNIC GROUP, ACADEMIC RANK, AND SEX: UNITED STATES, FALL 1983

ACADEMIC RANK AND SEX	TOTAL	RACIAL/ETHNIC GROUP				
		WHITE, NON-HISPANIC	BLACK, NON-HISPANIC	HISPANIC	ASIAN OR PACIFIC ISLANDER	AMERICAN INDIAN/ ALASKAN NATIVE
MEN AND WOMEN						
All Ranks	470,673	425,691	19,451	7,356	16,868	1,307
Professors	128,142	119,219	2,857	1,369	4,466	231
Associate Professors	111,887	102,246	3,969	1,604	3,784	284
Assistant Professors	113,330	100,176	5,847	2,008	5,002	297
Instructors	82,211	73,206	5,117	1,793	1,741	354
Lecturers	9,480	8,274	618	220	330	38
Other Faculty	25,623	22,570	1,043	362	1,545	103
MEN						
All Ranks	330,930	313,424	10,540	5,172	13,692	952
Professors	103,380	106,554	2,034	1,137	4,151	196
Associate Professors	83,589	80,100	2,461	1,210	3,176	229
Assistant Professors	73,810	65,692	2,964	1,309	3,905	216
Instructors	46,468	42,595	2,314	1,075	1,055	219
Lecturers	4,744	4,584	301	110	201	23
Other Faculty	18,939	13,899	466	251	1,204	69
WOMEN						
All Ranks	126,893	112,267	8,911	2,184	3,176	355
Professors	14,070	12,665	823	232	315	35
Associate Professors	24,711	22,146	1,508	394	608	55
Assistant Professors	39,164	34,484	2,883	619	1,097	81
Instructors	34,953	30,611	2,803	718	686	135
Lecturers	4,261	3,600	317	110	129	15
Other Faculty	9,734	8,671	577	111	341	34

Source: U.S. Equal Employment Opportunity Commission

PART II THE FUTURE OF BIA SCHOOLS



CHAPTER VII

Alternative Futures for BIA Education

Part I examined the history, background and performance of BIA education. This section, Part II, raises the question of whether there will or should continue to be a significant BIA presence in Indian education. Indeed, there are today many critics who condemn the quality of education received in BIA schools and who call for the transfer of these schools. Educators whose area of expertise is in Indian education recommend that the individual tribes make the ultimate choice whether BIA schools remain BIA-operated, become tribally contracted, establish cooperative ties with a nearby public school (facility and other resources shared), or transfer operations to a public school district. These educators further recommend that the BIA help to facilitate the choice of each tribe, once the tribal decision is made, by offering the tribe substantive on-site technical assistance, as needed and requested.

Still, the future of Indian education within the BIA-funded school system is closely associated with larger issues for the future of the BIA itself. Does the logic of self-determination lead to the eventual disappearance of the BIA--and thus its system of education as well? Is the BIA an organization that was created to exercise a paternal supervision of Indian affairs and which would have no real reason to exist, if this supervision were eventually withdrawn? If tribes were to be freed to fend for themselves without BIA oversight, what would be their future relationship to the states? Is it conceivable that, as some Indian groups are proposing, reservations collectively could resemble a 51st state, and that an Indian Department of Education analogous to a State Department of Education would then be formed?

Yet, it is difficult to imagine the achievement of a state of full Indian self-determination without much greater economic development than now exists on most Indian reservations. Such development would involve the acquisition of skills and the production of goods and services that mainstream America demands. Indian reservations would find it very difficult to exist in the modern age as isolated and autonomous social and economic units. Hence, even if many Indians continue to move back and forth between two distinct cultures, they will need to understand and be able to function effectively within the mainstream American culture. Given this hard reality, might Indians be served best by receiving their education in public schools, although knowing that these schools, unlike their BIA counterparts, rarely provide courses on Indian history and culture?

There are obviously no simple and easy answers to such complex questions. Indeed, there is no reason to believe that all Indians or tribes would answer them in the same way. Far from a monolithic or homogeneous group, the Indian tribes of the United States are extremely diverse in their outlooks, numbers, geographic circumstances, level of economic development, political sophistication, cultural and educational outlook. Because of this diversity, the future of Indian education could and probably should be pluralistic. What is educationally most suitable for one tribe and reservation could differ significantly from what is most suitable for another tribe and reservation.

The following discussions describe briefly five basic alternatives with respect to the future of BIA education.

Alternative 1: Replace BIA Administered Education with Tribal Systems of Education

The policy of the Federal government is to promote Indian self-determination. Yet, as long as the education of tribal children is undertaken by the Federal government, self-determination will be less than complete (unless continued Federal control of education programs is itself the first choice of the tribe). Indeed, there is perhaps no area of BIA involvement in tribal affairs that is more important to Indian self-determination. Education is a critical mechanism by which children learn their values, standards of conduct, sense of identification with a community, and other cultural elements. If a tribe seeks to make its own decisions in these fundamental matters for its own future, the tribe has little choice but to assume control over the education of its children.

The most direct way of obtaining such control would be to create a tribal system of education. Under the provisions of P.L. 93-638 (the Indian Self-Determination and Education Assistance Act), a tribe could contract to manage the full set of schools attended by children of that tribe. The tribal system would supervise and oversee the operation of all the individual BIA-operated schools (plus existing contract schools) on the reservation.

A tribal system would include a tribal educational staff with personnel, curriculum, bilingual, computer and other specialists. The tribal system would be responsible for the hiring of school principals and would review the hiring of individual teachers. The Federal contract with the tribe might specify standards of basic knowledge and skills to which the tribal system would then be held accountable. However, assuming that tribal education met these standards, the tribal system would have wide freedom and independence in choice of curriculum, teaching methods, textbooks, and other basic educational decisions. The Choctaw in Mississippi and the Tohono O'odham (Papago) in Arizona are currently considering how to best begin the contracting of their total education system now operated by the BIA.

The Federal government might also relinquish to the education department in each state, with tribal concurrence, the oversight of any contracts signed with tribes in that state. For example, the Federal contract might specify that continuing state certification would be taken as sufficient to demonstrate the fulfillment of the terms of the "638" contract. In this concept, the state would oversee tribal education much as it already oversees local nonIndian school systems. The Federal government would have merely a financial role in paying for the tribal schools.

If new tribal systems of education were created, they might also assume the responsibility for the operation of those public schools on the reservation that contain predominantly Indian students. By joining existing public and Federal schools in one system under tribal control and management, the tribe could achieve a unified system for the education of tribal children.

Consolidation of Federal and public systems would generate economies of scale and make it more feasible to hire specialists and consultants in curriculum, personnel and other areas of educational expertise--consultants who could tailor the educational program to the sociocultural and economic realities of the reservation. A common tribal system would also diminish the problems of overlapping public and Federal school boundaries and excessive student mobility among schools. At present, the public and Federal systems do not have a clear responsibility for many Indian students, because these students often remain only a limited time in each system.

A tribal system of education may not be feasible for some tribes because they are too small. Creation of a tribal system would work best for those tribes that have sufficient schools and students to justify a full scale system. The Navajo Tribe has recently established a commission to study the educational future of the tribe, including the possibility of a future Navajo school system for the whole reservation. The Oglala Sioux of the Pine Ridge Reservation have also recently taken steps to seek the creation of a single tribal school system for the reservation.

Besides the possibility of an insufficient number of students for some tribes, another possible drawback to a unified tribal system is the possibility that it may be seen as a step toward termination. If tribes are dependent on contract funding from the Federal government, this funding may be more susceptible to budget cutbacks, as compared with the current BIA schools. Another possible problem is that some tribes may at this point lack the administrative skill and political stability to operate a tribal education system successfully. Tribal politics might be further injected into Indian education. Where tribal members are seriously divided among themselves on questions of tribal culture, language, means of economic development, and education itself, there may not be much to be gained in trying to create a single tribal system. Indeed, an effort to unify deeply divided factions in one system could prove ultimately damaging to the education of the children themselves.

Assuming that a single tribal education system would be desirable for at least some tribal circumstances, the following options can be considered as means of promoting such a system.

Option 1: Make a policy statement formally announcing the encouragement and willingness of BIA to provide technical assistance to any tribe that desires to contract the operation of a unified tribal system of education.

Option 2: As per Public Law 95-561, as amended, make a policy statement formally announcing the potential willingness of BIA to allow state oversight of contracts for tribal education systems--perhaps by means of the state certification process.

Option 3: Make a policy statement formally announcing the willingness of BIA to contract with tribal systems that merge existing Federal and public schools into one tribal system.

Option 4: Make a policy statement formally announcing the willingness of BIA to provide for cooperative agreements between Federal and public schools.

Option 5: Fund a grant program to allow tribes to study the benefits of a tribal system of education and to develop contracting requests for this purpose.

Alternative 2: Transfer of BIA Schools to Public School Districts

A tribal school system would offer Indian students a system of education segregated from non-Indian students. Such segregation might well yield a stronger sense of Indian community and cultural identity. It might provide Indian students with a more comfortable, supportive and hospitable school environment. Yet, led by the Supreme Court, Americans fought a long and bitter battle to abolish past segregation of schools according to the race of the student. Integration of all races and peoples into American life remains a powerful ideal and goal of American society. While some Indians will reject this goal, other Indians may share it and prefer that their children be educated in an integrated school setting with both Indian and non-Indian students, as is reflected by the 90 percent of Indian children who now attend public schools.

Indian students may also benefit educationally from friendships and other associations with non-Indian students. Successful non-Indian students may offer academic examples that Indian students could follow. Non-Indian students may have educational, income and other home advantages that in some measure can be exchanged and shared in school with Indian students. Although some Indian students may withdraw and suffer in competition with non-Indian students, others may thrive and benefit from this competition.

Education of Indian students in public schools exposes them in their youth to the values and outlook of mainstream American society. Few if any Indians will live their lives without extensive contact with this society. Early exposure may diminish the

later burden of adaptation and learning. The economic development of Indian reservations will depend on the emergence of a class of Indian workers and businessmen able to function well in two cultures.

A few reservations such as the Navajo Reservation are so large, contain so few non-Indians, and otherwise have such special circumstances that the public schools are composed almost entirely of Indian students. In these cases, the public schools cannot offer a mixing of Indians and non-Indians as an alternative to the segregated education of BIA and tribal schools. Rather, public school education is distinctive mainly in that it offers a different set of administrative and financing arrangements. Local school boards in the public system may be more independent of tribal politics, whereas a contracted tribal system would be ultimately in the control of the tribal government. Funding of public schools would come in significant part from the state, whereas a contracted tribal system would be Federally-funded. State oversight and accreditation procedures would be automatic for a public school, whereas they could be optional for a contracted tribal system.

One potential advantage of a public school system is that it might maximize the total revenues available to Indian schools. As described in Chapter VI, the Federal government has numerous programs that target funds to Indian students in public schools. The most important of these programs is Impact Aid, but other significant sources of funds include the Johnson-O'Malley program and Title IV of the Indian Education Act of 1972. A tribal school system operated as a public school system would receive these federal funds in addition to substantial state funds automatically made available to any public school district. The total of Federal and state funds available to Indian public schools might significantly exceed the funds available to an Indian school run as a BIA contract school.

The majority of public school Indian students do not live on reservations. However, the public schools educate about 65 to 75 percent of Indian children even in states such as Arizona, New Mexico and the Dakotas which have large reservation populations. In other reservation states, almost all Indian children, including those living on reservations, attend public schools. Indian children in such schools generally mix with a student population in which the majority is non-Indian.

In short, rather than a tribal school system, another basic alternative would be the transfer of BIA students and schools to existing or newly created public school districts. These districts would also have the ability to consolidate existing Federal and public school facilities in a way that made educational and economic sense. Some BIA schools might transfer their students to existing public schools or, conversely, some existing public schools might be closed and their students shifted to existing BIA facilities.

Transfer of current BIA students to local public schools might well prove disruptive to these schools in the short run, especially if there were little advance notice. The public schools might also be confronted with a major increase in their costs of opera-

tion. They would need to hire new teachers, find more classrooms and otherwise meet the needs of a substantial influx of new students. The Federal government, however, could also take various actions to reduce the disruptions and to alleviate the fiscal burden of additional Indian students in public schools. While public schools might object to a large number of new Indian students, they would be legally obligated to provide public education for those Indian citizens who requested it.

In order to promote the future attendance of current BIA students in local public schools, the following options can be considered:

Option 1: Develop a program to provide planning grants to tribes to study the feasibility, educational benefits, fiscal impact and other consequences for involved parties of transferring students from BIA schools to the public school system.

Option 2: Facilitate the transfer of existing BIA facilities to the public school district to consolidate the management of existing BIA and public schools within a public system.

Option 3: If a tribe so recommends, make provisions to allow the establishment of a 10-year schedule for the phased transfer of BIA-school students to the local public school system.

Option 4: Fund a program whereby the Federal government would guarantee a tuition payment from Federal funds for each BIA student transferring to a public school system, this minimum to equal the average cost per student currently incurred in the public school system.

Option 5: Fund a program such as described in option 4, but phase it out over a 10-year (or 15-year) period.

Option 6: Fund a program guaranteeing that each BIA student newly transferring to a public school would bring this school Federal funds no less in total than the current ISEP payment for that student. (If existing Impact Aid and other Federal payments to the public school would already exceed the ISEP payment, no special supplemental funds would be necessary and the school would simply receive the same payments as current law provides.)

Option 7: Fund a program such as described in Option 6, but phase it out over a 10-year (or 15-year) period.

Option 8: Guarantee the public school system the higher of the two minimal payment guarantees described in Option 5 and Option 7.

Alternative 3: Individually Contracted BIA Schools

Many tribes have deep political divisions within the tribe. Tribal members sometimes disagree strongly on the degree to which the tribe should maintain its traditional culture versus the degree to which it should adopt modern and Western ways. Some members of the tribe may favor a broadly assimilationist strategy, while others may prefer rejection of mainstream American life. Any attempt to impose a single tribal curriculum and cultural outlook might infringe on the beliefs of one or another of these groups.

Tribal politics on some Indian reservations has been unstable and unpredictable. Tribal government is an experiment in most cases begun within the past 60 years. Until the 1960s, many tribal governments were as much creations of the BIA as they were genuine expressions of Indian self-determination. Tribal government did not always include those tribal members seen as the most legitimate leaders of the tribe. Indeed, some tribal leaders regarded their leadership positions as an opportunity for self-promotion and the distribution of favors to selected friends and relatives. In short, although tribal government is evolving and has improved significantly, it is still in some cases an imperfect instrument for the expression of the preferences of Indian people.

The tribal members with the greatest stake in BIA schools are the parents of the children who attend these schools. Indian parents, like other parents, are concerned that their children receive an education that prepares them to function well in society and to earn an adequate income. Indian parents can also see directly the evidence of any failures on the part of the schools to achieve these objectives. In short, the best people to judge the educational needs of Indian children are the parents of the children themselves.

At present, the contracting mechanism of P.L. 93-638 operates through the tribe. If the tribe wishes to deny a local contract for a BIA school, it has this prerogative. Thus, contract schools are at present ultimately the responsibility of the tribe.

Another basic alternative would be to contract directly and individually with existing tribal school boards, if "638" were amended. Each contract school would continue to receive its pro rata share of BIA education funding, based on the ISEP formula. Voting in elections for school board members might be limited to parents of children or to any legitimate member of the immediate Indian community from which the school drew its students. It would exclude tribal members in other areas who had less immediate interest and concern in school affairs. School board elections would constitute separate political contests on the reservation, distinct from wider contests for other tribal government offices.

Individually contracted schools might normally choose to operate the school with a management team selected by the school board. However, there might also be

provision for subcontracting the management of the school to nonprofit or even private profit-making organizations. For example, if a private organization were willing to undertake the responsibility, this organization might be given a contract by a local school board to take over and manage the BIA school. The existing teachers might organize themselves to contract with the school board, if both sides found this approach agreeable. The school board would in any case have wide latitude in the selection of the contractor, or whether it preferred to undertake its own school management. If it preferred, the school board would also have the option to subcontract to a tribal education system but this would be up to the local board to decide.

If a policy favoring individual direct contracts with each school board should be accepted, the following options could be considered.

Option 1: Adopt a policy to sign BIA education contracts with local school boards individually rather than with tribal governments (with no tribal concurrence required).

Option 2: Fund a grants program to allow local boards of current BIA schools to plan and study the possibility of signing an individual contract to operate the school.

Option 3: Adopt a policy statement endorsing and clarifying the ability of local school boards to subcontract the operation of the school to private organizations, including nonprofit and possibly profit-making organizations as well.

Alternative 4: Individual Education Vouchers

Even within the immediate community of a school, there may be substantial disagreement among Indian parents on the best way to educate their children. Some parents may prefer a tribal school, others a public school, a third group a contracted school and a fourth group a mission boarding or other private school. Any educational strategy that required all local parents to follow a common educational approach would mean that some parents were unable to fulfill their own objectives.

For the situation just described, an alternative would be to adopt a voucher system for Indian education. The parents of each student would receive a "voucher" for the payment of a given amount of money to the school of their choice. Indian students therefore would all be entitled to the same amount of Federal funding, whether attending a tribal, public, individually contracted or private school. Such a voucher system could be funded by abolishing some or all of the existing Indian education programs of the Federal government and pooling the funds thereby made available for distribution as vouchers. At present, as described in Chapter VI, total Federal spending for Indian education is more than $700 million per year.

A voucher system would maximize the freedom of Indian parents to select the school they believed best for their own child. By encouraging the creation of alternative school systems, vouchers would also promote educational experimentation and innovation. The competition among schools for students and the vouchers they brought

would help to promote improvements in educational effectiveness and the efficiency of school operations. In this scheme, the future of BIA schools would depend on their ability to continue to attract students and the funding that accompanied each student.

The existing ISEP formula already amounts to a limited voucher scheme. Under the ISEP formula, an Indian student attending a BIA school or a contract school yields the same revenue to the school as determined by the formula. An expansion of eligibility to receive ISEP funding would thus amount to a voucher scheme. A full voucher plan would provide for distribution of the ISEP funds for each Indian child in public and private schools, as well as in BIA and contract schools. Moreover, the pool for ISEP funding could also be expanded to include Johnson-O'Malley funds, Chapter 1, Title IV, Impact Aid, and/or other funding sources now used for Indian education in BIA and public schools.

Vouchers might not be needed or might not work well in isolated and remote areas where there are not sufficient students for more than one school. Determining the eligible population for vouchers would also be a problem. If all Indian students were eligible, a large new funding burden would be imposed on the Federal government for the students now in public schools. Current State financial burdens would be correspondingly reduced. If eligibility of Indian students is limited (as would probably be necessary), it might prove difficult to draw the lines distinguishing those Indian children eligible from those not eligible for vouchers.

Another concern with respect to a voucher system is that it might encourage the better BIA students who are more knowledgeable and motivated to leave BIA schools. The BIA schools themselves might be left with the students with the greatest learning, emotional and other problems. The current availability of public schools as an alternative to BIA schools already has had this consequence, but a voucher system might create still further pressures in this direction.

If a decision to follow a voucher strategy were adopted, the following options could be considered.

Option 1: Expand the ISEP formula to cover all Indian students and permit distribution of ISEP funds to public and private schools--further including in the pool for ISEP funding many or all of the current sources of financial support for Indian students in public, BIA and contract schools (such as Johnson-O'Malley and Title IV funds).

Option 2: Expand the ISEP formula to allow distribution of its funds to public and private schools, but limiting its applicability to Indian children currently located where they would be eligible to attend existing BIA or contract schools, and including in the ISEP pool the Federal funds currently being spent in these areas for Indian children.

Option 3: Expand the ISEP formula as in Option 1 or Option 2, but do not allow any distribution of ISEP funds to private profit-making or religious schools.

Alternative 5: A Revitalized BIA Education System

The current BIA education system is in dire need of improvement. The system lacks a concrete mission as well as goals and measurable objectives directed toward implementing the program's mission. The existing system has become compromised among various opposing, abstract goals, concepts, and pressures, internal and external to the Office of Indian Education Programs (OIEP). The BIA-operated schools do not represent full Indian self-determination because BIA-operated schools remain in the hands of Federal employees and are limited by Federal budget parameters and policies. Yet, considerable influence is exerted by tribal school boards in the operation of BIA schools in matters concerning personnel selection, curriculum, textbooks and so forth. More informally, Indian tribal governments have had a significant part to play in guiding the operation of BIA-operated schools, sometimes in conflict with Federal parameters and policies.

The BIA schools do not represent a full acceptance of a philosophy of integration of Indian students and Indian education into American society. Rather, BIA schools maintain a separate system of education in which Indian students have little or no direct interaction at school with non-Indian students. The Indian students of BIA schools are rarely exposed to students who come from more educationally advantaged families or backgrounds. BIA schools thus do not expose their students in the classroom to the intensely competitive attitudes and other typically non-Indian cultural elements that Indian students may later encounter and have to deal with if they choose to leave the reservation.

Successful schools depend on administrative structure, sources of financing, assignment of oversight responsibility and other mechanical matters. Equally important are the attitudes, dedication, and enthusiasm for the task of principals, teachers, parents and students. A number of BIA school staffs do exhibit the attitudes, dedication and enthusiasm necessary to build an effective school.

Although there are problems with the present BIA education system, the proper comparison should not be of the existing deficient BIA system with some ideal of Indian education. As a practical matter, it may be possible to do more for Indian students by improving and revitalizing BIA education than by transferring existing BIA students to other educational systems where the results would also be uncertain. There may be little to be gained educationally from a radical change of the administrative and financial structure of Indian education.

A radical change might be impractical for several reasons. First, statutes mandate that tribes must agree on fundamental changes to the operation and organization of the Office of Indian Education Programs. Tribes have seldom supported drastic changes in recent years. Major changes almost always require increased budget allocation

which is not likely to occur. Should a major reorganization of OIEP be deemed necessary, changes approved and implemented in phases may be more likely to achieve the long-range improvements sought.

Although a radical reorganization may not be feasible, some steps can be taken to revitalize the BIA-funded education programs in the immediate future. One step would be to fine-tune the personnel/recruiting system to assure that the effective teachers have incentives to remain in the BIA-funded system. A recruiting plan could be developed to obtain well qualified education professionals at all levels, from certified teachers to capable administrators to key specialists to the OIEP Director. Another step that could have rapid educational dividends would be to identify and then maximize existing human and fiscal resources that could enhance OIEPs classroom instruction and educational administration. Collaborative, on-going arrangements could be established with major universities that are located near to high concentrations of BIA-operated schools and that have substantial resources and interest in improving Indian education. Several universities have already indicated a willingness to provide OIEP with office space, database networking, and support services to house key OIEP technical staff such as researchers, policy analysts, and curriculum developers. Such field-based staff could benefit from the resources available at major universities as well as the field-based location in order to provide BIA-operated schools and tribally contracted schools (if requested) with more responsive, timely on-site technical assistance.

If a policy to revitalize BIA education were adopted, the following options could be considered.

Option 1: Make a formal policy statement committing the BIA to take steps to improve the quality of BIA-operated schools and stating that many of these schools will be continued for at least another decade or two. Indicate that a planning, policy analysis and research center will be established in the field. Such a center could assist in the implementation of the needed changes in the field by offering a high level of technical assistance to agencies and schools. Adopt and provide the necessary funding and other support for measures (including options raised in Part III of this Report) designed to revitalize BIA education.

Option 2: Work immediately to improve the present system by reorganizing the administrative structure within OIEP. Maximize the use of the available expertise of current staff in order to improve the quality of classroom instruction and oversight. OIEP reorganization may require the transfer of key program staff (curriculum, bilingual, Chapter 1, Special Education, MIS, and research) in order to initiate a program of on-site educational technical assistance provided by OIEP professionals. As soon as possible, establish field-based technical assistance centers at universities which are willing to provide office space, access to databases, and support services at little or no cost to OIEP. Where current staff lack expertise, hire the highest caliber of non-Bureau personnel by recruiting at major universities and other non-Bureau school

systems. Revitalize efforts to maximize the quality of teaching and learning taking place in the classroom.

Conclusion

The future of BIA education will not be decided in isolation from other basic trends in Indian affairs. Indeed, this educational future will be a reflection of the extent to which Indians join mainstream American society or instead come to establish independent political and economic cultures on reservations. The status of Indians in American society has been a difficult and perplexing subject for several centuries of American history. At one time it was believed that Indian policy questions would eventually disappear because all Indians would lose their separate identity and blend into mainstream society. Yet, this assumption, like many other past beliefs with respect to Indian affairs, has also proven false. Today, Indian policy is torn between conflicting goals and is filled with other problems that seem to defy solution.

If there is one new element, it is perhaps a stronger conviction today that no single answer will prove to be appropriate for all Indians. Given the very wide diversity of Indian circumstances and cultures, each Indian tribe and reservation may work out a somewhat different resolution to its future--educationally and in other respects. It may therefore be that none of the alternatives described in this chapter will be adopted in full for all Indians. Rather, each of the alternatives may find some application in one tribe but not in another. The most critical problem may be to match properly the policy alternative with the varying needs of Indian people in different tribes, cultures and other circumstances.

CHAPTER VIII

Facilities Management for an Uncertain Future

It is possible that over the next decade or two enrollment in BIA-operated schools will be sharply reduced. Some students may shift to tribal schools, others may shift to public schools, and still a few others to mission or other private schools. Yet, it is also possible that enrollment in BIA schools will hold steady, increase somewhat or conceivably even increase significantly. In an era of self-determination, each tribe will have to make some difficult decisions concerning the educational future of its children. Considerations of the availability of government funds, BIA school policies, and other outside factors will also inevitably have a major role in these tribal decisions. It is impossible to predict with any certainty what the future may hold for current BIA-operated schools.

The uncertainties facing BIA education pose particular problems for the management of school and dormitory facilities. Construction of new schools and major renovations and repairs of existing schools involve large capital investments that can have a lifetime of twenty years or more. If BIA students will soon be shifting to public schools, major school investments could leave the BIA with expensive new facilities that no longer serve an educational purpose. However, it is also possible that tribal or public schools would take over existing BIA facilities.

Problems become particularly difficult when an existing BIA facility is in poor condition. There may be strong pressures to take immediate action to repair and improve a school that is currently deteriorated and run down. Yet, if this school does not make sense educationally because of its small size, its location near a superior school, or for other reasons, major expenditures to improve the school could prove wasteful. For example, a BIA school in poor condition could be located near a public school that has sufficient capacity to absorb the students in the BIA school. Rather than build a new BIA school, or spend substantial sums to renovate an existing school, it might be preferable to send the BIA students to the public school. The answer depends not only on facilities considerations but also to a large degree on the type of education that would be available for Indian children in public schools and the preferences of tribal members.

Some parents may prefer to send their children to public schools, believing that interaction with and competition with non-Indian children will be educationally beneficial and will prepare their children for adult competition in mainstream American

society. But other parents may prefer a more protected and supportive environment in which tribal customs, behavior and values receive much more emphasis. They may strongly prefer that Indian children attend tribal or BIA-operated schools, rather than entering into the public school system. In some areas, such as the Navajo Reservation, almost all the students will be Indian students, whether entered in a public or a BIA school. At issue in such cases is the form of management, the financing and the type of political control over the school.

A decision to send current BIA students to public schools and to close a BIA school may foreclose more than the possibility of a future BIA school. It may also, as a practical matter, preclude the possibility of a future tribal school. Once Indian children are attending public schools, it may be very difficult to create a new tribal school under a BIA contract. The BIA may have no funds or be unwilling to fund new construction to provide a contract school. Hence, if a tribe wishes to preserve the option of tribal education through the contracting mechanism, it may have a strong incentive to keep current BIA schools open. The tribe may not be ready for contracting and may not see BIA schools as the long term answer, but may still resist strongly any proposals to close BIA schools.

The issue of a tribal, public or BIA system of education is not the only significant educational matter that depends critically on facilities decisions. For example, another important educational issue may be whether to include all grades--from kindergarten through twelfth grade--in the same school. Other options would be to include grades from kindergarten through the eighth grade in the same school, or to separate children into different schools at the sixth grade. Another critical educational issue is whether students should attend day schools or boarding schools. If boarding schools, should these boarding schools be located on or off the reservation? Another issue is the desirable size of BIA schools. Are small schools closely tied to the community preferable, or are larger schools that offer greater educational diversity and other benefits a better answer? What if a large school requires collection of students over very wide areas? What school boundaries and busing distances are socially and economically acceptable in order to achieve educational benefits that may be obtainable in larger schools? In making facilities decisions all these educational issues are involved.

A comprehensive plan for future BIA facilities would therefore be not only a facilities plan but also a comprehensive education plan, encompassing and determining many other areas of BIA education. This chapter (indeed this report) does not seek to develop a blueprint for the future schools and other facilities of BIA education. Such a plan would be, for one thing, difficult to reconcile with a policy of tribal self-determination. Rather, the aim of this chapter is to examine possible processes for making facilities decisions and to describe factors and information that should enter into facilities decisions.

Policy making for BIA education is a highly pluralistic enterprise that involves at a minimum the tribes, local school boards, and parents of children in BIA schools,

along with the administrators of the BIA education system and Congress. Policies for BIA education necessarily reflect the participation of all the involved parties and evolve from discussions and interactions that do not follow any well defined path. This process does not lend itself to the development of a fixed comprehensive plan. Many of the key issues have a local character and the full facts and considerations often are not well understood outside the immediate area. Moreover, a comprehensive, internally consistent, and logical plan could be developed only if some limited group (presumably of expert planners) were given the authority to make the final decisions on the future of BIA education. Yet, in a matter as value-laden as education, there would be little justification for deferring in this way to any set of experts. Politically, the likelihood is remote that tribal, Congressional and other political leaders would agree to be governed in their future decisions by the dictates of any comprehensive plan.

Existing Facilities

It is difficult to obtain details about the exact condition and need for repair, renovation, replacement or other actions with respect to existing BIA and contract schools. However, there are a few basic facts that are fairly well known. There were 167 BIA and contract schools in 1987 (excluding dormitories). Of these schools, 102 were BIA-operated schools and 65 were contract schools. The number of BIA-operated schools has been declining for many years, a decline that was accelerated by the transfer in the early 1980s of all BIA Alaska schools (45 existing in 1979) to the control and management of the State of Alaska. Even excluding Alaska schools, the number of BIA-operated schools has been declining steadily since the 1950s. There were 212 BIA-operated schools outside Alaska in 1952, a figure that had fallen to 158 by 1965 and fell further to 120 in 1980 and 102 in 1987 (for other years, see Table 2 in Chapter II).

Since the mid 1960s, however, most of the decline in the number of BIA-operated schools has not represented a transfer of schools outside the BIA-funded system. Rather, the decline is due mostly to the transfer of BIA-operated schools to the management of tribal groups under contract. Indeed, the total number of schools in the BIA-funded system (with Alaska still excluded) has increased since the mid-1960s. Total BIA-funded schools have risen from 141 schools in 1970 to 158 schools in 1980 and most recently 167 schools in 1987.

There has been some absolute decline, however, in BIA-funded boarding schools. From 1973 to 1987, BIA-operated boarding schools dropped from 71 to 46 schools. Although contract boarding schools rose at the same time from 4 to 11 schools, the net outcome was a significant decline over this period from 75 boarding schools to 57 boarding schools. At the same time, however, the total number of day schools (BIA-operated and contract) outside Alaska rose from 71 to 110. All told, there has been some decline in the number of boarding schools, a greater increase in the number of day schools, and consequently a modest increase in the total number of BIA-funded schools.

Trends in enrollments generally mirror these trends in the numbers of schools. Since 1970, there has been a drop of about 25 percent in enrollment in BIA-operated schools outside Alaska (also excluding dormitories). This drop, however, has been more than matched by a sharp increase in enrollment in contract schools. The net result is an overall 5 percent increase in total enrollment in BIA-operated and contract schools from 1970 to 1986. Over this period, enrollments peaked in 1978 at 40,280 and dropped to 38,272 in 1987 (see Table 3 in Chapter II for further enrollment details).

Not surprisingly, as the number of BIA boarding schools has declined, the number of BIA boarding students has also dropped. The number of boarding students in BIA-operated schools fell from 19,169 in 1973 to only 9,870 in 1987. Although boarding students in contract schools rose over this period from 500 to 2,080, the overall result has still been a sharp decline in total boarding students attending BIA-funded schools, because tribes wanted their K-8 students attending day schools. (It should be noted that figures for enrollment in boarding schools are often misleading, because they include the many day students who attend boarding schools. The above figures include only actual boarding students.) Since boarding students involve a total cost substantially greater than day students, the declining numbers of boarding students have resulted in significant cost savings to the BIA education system.

Since 1970, the rise in the total number of BIA-funded schools has been considerably greater than the rise in enrollment. As a result, there has been a tendency towards smaller schools. The average size of a BIA-funded school in 1970 was 256 students; by 1987, the average size was 229 students. For many years the goal of school administrators throughout the United States was to consolidate schools in order to achieve educational economies of scale. However, there has been a shift in thinking in this regard in recent years. Educators now see advantages in smaller schools, such as promoting greater parental involvement, a stronger sense of community and a less bureaucratic and impersonal school environment.

It is mainly due to the growth of contract schools that the average size of schools in the BIA-funded system has been decreasing. The average size of a contract school in 1987 was 164 students, compared with an average size for a BIA-operated school of 271 students. The movement toward tribal contract schools is consistent with the nationwide recognition of new benefits in smaller community and neighborhood schools.

The Current Facilities Backlog

Estimates of the need for new or substantially renovated facilities tend to be subjective. When is the condition of a school so poor that it must be replaced? When is the design of a school so outmoded that it is no longer educationally acceptable? This is often hard to determine. A more objective determination is obtained when the projected future maintenance costs for a school (properly discounted to their present value) begin to exceed what it would cost to build a new school. At that point, it be-

comes clear-cut, at least economically, that the school should either be abandoned, or a new school should be built.

The BIA estimates a backlog of long-run facilities needs. This backlog is not based, however, on any clearly specified criteria. In 1986 the backlog of school facilities improvement and repair (FI&R) projects was estimated to be $537 million. The new school construction backlog was estimated to be $116 million. At the rate of FI&R spending from 1979 to 1986, the 1986 FI&R needs amounted to an eighteen year backlog. At the rate of new construction spending from 1979 to 1986, the 1986 new construction backlog amounted to a six year backlog. There have been large variations in year-to-year spending for new construction. In 1979 and 1980, total funding of new construction was $35.6 million and $29.5 million, respectively. Over the years from 1979 to 1986, the average annual spending for new school construction was around $20 million per year.

Given the large backlog of FI&R and new construction needs, a system of setting priorities is clearly necessary. Indeed, the system for allocating priorities among potential projects becomes critical in determining which projects are actually undertaken in the near future. In 1979, the BIA published regulations establishing a procedure and setting out criteria for the ranking of new school applications. Under these regulations, the ranking of construction projections is determined by the percentage of "unhoused" students that the proposed project could accommodate. The regulations stated:

> (a) The number of points assigned for priority ranking of an application for construction is equal to the percentage of the school's enrollment that is "unhoused." Students are considered unhoused:
>
> (1) When the condition of the school facility is such that it can no longer be used without major repairs, renovations or complete replacement.
>
> (2) When the school can no longer meet the space requirements of an approved educational program.
>
> (3) When the current enrollment of the school exceeds the design capacity of the facility.
>
> (4) When seats are not available in any other school--Bureau operated, tribal contract or public--within a one hour's bus ride of home.
>
> (b) When two or more project schools have the same number of points (i.e., the same percentage of unhoused children), preference for priority purposes shall be given to the schools located the greatest distance from other schools which could accommodate the unhoused children.

Under procedures set out in the 1979 regulations, the BIA publishes each year in the Federal Register a priority listing for new construction projects. The priority listing for fiscal 1982 contained 42 new school construction projects, ranked in order of priority. However, the number of new school projects ranked by the BIA has sharply decreased in more recent years. For fiscal 1987, the BIA listed and ranked only two new school projects--St. Francis Indian School in South Dakota and Turtle Mountain Middle School in North Dakota.

As new construction funding has declined, the importance of funding for facilities improvement and repair (FI&R) has grown. In 1986, the BIA published guidelines establishing a priority system for FI&R projects as well (including both school and other types of facilities). These projects were to be ranked by the following categories:

1 -**Safety-related work of a critical nature**

2 - **Sanitary-related work**

3 - **Safety-related work of a non-critical nature**

4 -**Work required because of a violation of code or regulation**

5 -**Work required or desired because of functional deficiencies**

In subsequent Federal Register notices, BIA listed 25 FI&R projects as approved for fiscal year 1987, subject to availability of funds. These projects were:

1. Bullhead Day School
2. Eagle Butte Law and Order Facility
3. Mandaree Day School
4. Fort Yates Sewer System
5. Haskell Indian Junior College
6. Carter Seminary
7. Papago (3 sites)
8. Santa Fe Indian School
9. Tuba City Elementary School and Headquarters
10. Beclabito Day School

11. Crystal Boarding School

12. Wingate Elementary School

13. Wide Ruins Boarding School

14. Low Mountain Boarding School

15. Shonto Boarding School

16. Nazlini Boarding School

17. Tuba City High School Roof

18. Warm Springs Agency (4 sites)

19. Cherokee Law and Order

20. Manderson School

21. Crow Creek High School

22. Low Mountain Sewer Lagoons

23. Rough Rock Demonstration School

24. Chemawa High School

25. Jones Academy

The criteria currently being used to rank new construction projects and FI&R projects are incomplete in several important ways. In fact, the current statements of these criteria leave out key considerations that in practice will almost inevitably be taken into account in making facilities decisions. The percentage of "unhoused" students, for example, does not take into account the possibility of installing temporary facilities, or the difficulty and educational impact of taking this step. Two schools may both be in poor condition, but one could still be much worse than the other--which will not show up in the percentage of unhoused students. It is also unrealistic to ignore cost considerations altogether. These are merely a few examples; many other factors could be listed that necessarily enter into educational facilities decisions, but are not included in current formal criteria for setting priorities.

Ideally, the priority setting process for new construction and FI&R projects should take into account the full educational impacts on the students and the full financial impact on the government of alternative facilities actions. Such an analysis would first project the educational and financial consequences with no new facilities action. The

second step in the analysis then would be to project the educational and financial consequences with the new facilities constructed. Comparing what would happen both with and without a new facility, one would obtain an estimate of the educational and financial impact of the new facility. An analysis of this kind is an educational version of a standard investment analysis done by a business or a standard benefit-cost analysis done for a proposed government project.

If an educational and financial impact analysis were available for each proposed new construction or FI&R project, then the BIA would be in an informed position to set priorities among projects. Such an analysis need not be done in exhaustive detail, but should highlight and make approximate estimates of the key impacts. At present, however, there is no systematic procedure for developing such estimates of the impacts of new projects.

Financial Considerations in Making School Facilities Decisions

The lack of inclusion of costs and other financial factors in current formal criteria for setting new construction and FI&R priorities is unrealistic. While costs may not be the ultimate determining factor, there are few areas of government in which costs can be ignored altogether. In fact, while they are not formally specified, costs are in practice an important consideration.

Costs are an important factor, for example, in assessing the merits of constructing new small neighborhood schools-- which in the BIA-funded system would in many cases be contract schools. A movement toward small community and neighborhood schools may pose some conflicts with maintaining high efficiency of school operations and keeping costs to a minimum. As examined in Chapter V (see Table 10), the average additional instructional cost for BIA schools with fewer than 100 students has been about $1,000 per student per year. Once above 100 students, however, there has been much less difference. In 1985, the average instructional cost for schools with 100 to 250 students was $3,925 per student, compared with costs of $3,765 per student for schools with 251 to 500 students, and costs of $3,375 per student for schools with greater than 500 students.

However, the extra cost per student for small schools is much less than the added cost to the BIA for provision of boarding facilities. According to the ISEP formula, each additional boarding student costs the BIA about $3,000 per year above the costs of a day student. Moreover, the financial impacts of boarding schools are much greater, because the total number of boarding students (11,950 in BIA-funded schools in 1987) is much larger than the total number of students (3,381 in 1985) in small schools of less than 100 students.

The issues of small schools and boarding schools are closely linked, because for many BIA students the alternative to attending boarding school is to attend a small community school. Many students live in isolated and remote locations where it would be impossible to transport more than a fairly small number of fellow students to a

common site for a day school. For many years, the BIA policy was to try to shift these students to boarding schools, partly reflecting a philosophy that a larger school would be educationally beneficial. Another consideration was that many boarding students came from problem homes, and might be better served by the boarding school environment. More recently, however, the BIA philosophy has shifted away from boarding schools and towards day schools, partly reflecting greater national appreciation of the advantages in smaller local and neighborhood schools.

To the extent that small day schools are educationally preferable, there can be little argument for boarding schools, because day schools--even very small ones--are much less expensive per student than boarding schools. Hence, an issue will arise only when a boarding school may be educationally preferable. In that case, a determination must be made whether the educational and social benefits of boarding schools are worth the much higher cost per student of boarding facilities.

Another set of fiscal and educational issues arises when the question is whether to transfer students from BIA to nearby public schools (or vice versa). Besides the relative educational benefit of a BIA school versus a public school, another issue is the relative cost per student of operating BIA schools versus public schools. In general, public schools have lower costs per student than BIA schools. Indeed, in some cases these costs are much lower. For example, the average costs at the Bridger Day School, a BIA-operated school in South Dakota, were $5,028 per student in 1985, compared to a statewide average cost for public schools in South Dakota of $2,892. At the Taos Day School in New Mexico, another BIA-operated school, average costs in 1985 were $6,262 per student. By comparison, the statewide average cost for public schools in New Mexico in 1985 was $3,153 per student.

Although most BIA-funded schools, like the two BIA-operated schools just mentioned, have higher costs than public schools, this is not always the case. Wyoming, for example, has funded its schools generously--in 1985 at an average of $4,799 per student--reflecting ample past receipts of state revenues from oil and gas, coal and other energy taxation. By comparison, the 1985 costs of the St. Stephens School in Wyoming--a contract day school--came to $3,980 per student, well below the statewide average cost of Wyoming public schools. These costs include both funds appropriated for BIA education and funds coming from the Department of Education.

Despite the exceptions, in most cases public schools will have lower operating costs than BIA-funded schools. Again, from a national perspective (and ignoring for purposes of analysis the educational quality differences), movements of students to these public schools will reduce total national costs of education.

Moreover, the movement of BIA students to public schools often would not have any adverse financial impact on the public schools. There are a variety of Federal programs--the largest and most important impact aid--that compensate local public schools for the costs of providing education to Indian students. Federal payments per

Indian student in a public school in many cases exceed the statewide average cost per student in public schools. For example, in South Dakota the Lyman school district received on average $4,281 in federal funds for each Indian student in its public schools in 1985, compared with an average South Dakota public school cost of education of $2,892 per student. Indeed, out of the total 168 BIA-funded schools in 1985, for 47 of these schools, a nearby public school would have received Federal payments for each Indian student exceeding the statewide average cost per student in public schools. In short, these public schools might well have benefited financially from the transfer of additional Indian students to attend them.

However, in the majority of cases--121 out of 168 schools--Federal payments to a nearby public school for Indian students would fall below statewide average costs per student. For example, in the case of the Dunseith Day School, a BIA-funded school in North Dakota, total Federal costs equalled $4,948 per student in 1985. As shown in Table 1, the payments made by the Federal government for each Indian student in a nearby public school, Dunseith #1, were $2,375 per student. A transfer of a student from the BIA-funded school, Dunseith Day, to Dunseith #1 would have had the following fiscal consequences. The costs of BIA-funded education would have been reduced by $4,948 per student, but the net fiscal savings to the Federal government would have been much less, $2,573 per student, because higher total payments to Dunseith #1 would have been required. The public school system, however, would be taking on a new Indian student with an average cost (if the statewide figure is representative) that exceeded Federal revenues available for this student by $835.

Considering the various sources of revenue available to them, tribes may want to consider that a new public school on a reservation might well receive significantly higher total revenues per student than either an equivalent BIA-operated school on the reservation or a contract school. In some cases, higher Federal revenues per student would be received by students in public schools, compared with the Federal revenues received in nearby BIA-funded schools. Even when this is not the case, a public school on a reservation would be able to add significant State funding to the substantial funds it also received from the Federal government. In many cases the combination would exceed the current total Federal expenditure per student in BIA or contract schools. Hence, for tribes a financially attractive alternative to contracting in some cases might be the creation of a new reservation and predominantly Indian public school. Of course, another factor to be considered is the security of future funding, and the likelihood that current funding levels for the various Federal and state programs will continue.

Looked at from the Federal government's perspective, rather than the tribal view, the Federal government's financial incentive (and still ignoring the important considerations of educational quality) will not always lie in encouraging students to transfer to public schools. In many cases such transfers will result in a net increase in the outlays of Federal funds. For example, considering only ISEP payments, out of the 168 BIA-funded schools in 1985, for 45 of these schools the Federal payments to a nearby public school per Indian student would exceed the current ISEP payments

TABLE 1

COMPARISON OF 1985 FEDERAL PAYMENTS TO A BIA AND A PUBLIC SCHOOL

State: ND	Average State Cost	Federal Payments to BIA-Oper. School		Federal Payments to Comparison Public School	
	$3,210	Dunseith Day (ADM: 148)		Dunseith #1 (School ADA: 430) (Indian ADA: 310)	
Bureau of Indian Affairs		Amount	Average	Amount	Average
ISEP-Instructional		$391,460	$2,645	$	$
Facilities Management		68,890	465		
Contract Support		0	0		
Johnson-O'Malley					119
			$3,110		
U.S. Dept. of Education					
Title IV (92-318)				49,262	159
Impact Aid (81-874)				406,192	1,312
Impact Aid (81-815)				0	0
Chapter 1 (ECIA)		62,557	423	128,126	298
Chapter 2 (ECIA)				8,444	20
Handicapped Education (94-142)		20,505	139	12,040	28
Bilingual Education (Title VII)		142,250	961	160,366	373
Other (81-874 etc.)				0	0
U.S.Dept. of Agriculture					
School Lunch Programs		46,649	315	28,253	66
TOTAL FEDERAL PAYMENTS:			$4,948		$2,375

per student to the BIA-funded school. If all the students in these 45 BIA-funded schools transferred to nearby public schools, the newly required Federal payments to public schools in total would exceed the current ISEP payments for these same students by $13.4 million. Although ISEP payments are only part of the total costs of BIA schools, they may represent the most variable part, and the biggest source of potential savings, if student numbers in BIA-funded schools were to decline.

The purpose in analyzing the costs and other fiscal impacts of alternative school arrangements is not to suggest that these impacts are in themselves decisive. However, such an analysis reflects the fact that costs and fiscal impacts are important considerations in the system of Indian education. An informed set of decisions on facilities management and other educational issues will depend on an accurate assessment of the costs involved to the various parties. Such assessments by and large have not been performed--at least in any formal and explicit way--in the past.

Coordinating the Use of School System Facilities

In many cases BIA schools are in isolated locations, far removed from any other BIA school. The main alternatives are to send children to a boarding school somewhere else, or perhaps there is also a nearby public school. In such cases the fiscal impacts can be examined in the manner described above.

In other instances, however, there are a number of BIA schools close enough to one another that some students have more than one realistic alternative within the BIA school system itself. This creates a more complicated situation and new questions such as the following. Given a set of students who will attend BIA schools, how many schools are needed to serve these students and where should these schools be located. A smaller number of larger schools might reduce the per student costs of school operation and offer more diversity in curriculum, more counseling and in general more specialized assistance. However, fewer schools would also create higher transportation costs, more student time spent in busses, and some loss of student time in school when poor weather made it impossible for students to get to school. Larger schools might also be more impersonal, losing the advantages of small neighborhood schools.

In practice, of course, it is almost never possible to build an entirely new school system from the ground up. The decisions of the past and the set of school facilities that resulted from these past decisions become the starting point of the present. Future decisions typically will also be made one by one--whether it is desirable to consolidate two schools, to build a new school, to renovate an old school, and so forth.

The possibility of consolidation of BIA schools in some areas is not academic. The BIA maintains a facilities construction operations and maintenance system (known as "FACCOM"). In October 1987, FACCOM data showed the total available space contained in the instructional portions of BIA-funded school facilities to equal 15.7 million square feet. BIA regulations require 130 square feet of instructional facility

space per student in elementary school and 145 square feet per student in secondary school. (They also require 200 square feet of dormitory space per boarding student.) Given the current number of students in BIA-funded schools, total space requirements for these schools came to 7.8 million square feet. Comparing required space with total available space, FACCOM data found that only 50 percent of total space was being utilized.

However, the reliability of FACCOM data is uncertain. It is probably accurate enough for many schools, but inaccurate for some. As part of the preparation of this report, BIA school principals were surveyed. Since only some of the principals responded, the answers represented less than a complete picture. Among the responding principals, they reported sufficient space in their schools for a total capacity of 23,959 students. By comparison, their total attendance during count week was 19,800 students. Thus, the principals of these BIA schools themselves estimated an average space utilization rate of 83 percent.

However, school attendance at other times of the year is typically less than during count week. Principals responding to another question on the OIEP survey reported May attendance of 89 percent of count week attendance for these same responding schools. Using the May attendance, the utilization rate for BIA-funded schools was 74 percent in May of 1987.

Overall utilization rates, however, may have little significance. Unless several schools are located in close proximity to one another, there may be few if any alternatives to an existing underutilized school. Even when two or more underutilized schools are close enough to shift some students from one school to another school, it may make sense to keep both schools open. A decision on what to do with existing schools will often differ substantially from what one would do in designing an entirely new system. Underutilization of existing schools may simply be an unavoidable consequence of reasonable past decisions made in different circumstances.

A decision on whether to consolidate among underutilized schools is much like a decision on whether to build a new school, or any other facilities decision. In making such decisions careful planning becomes essential. Yet, it is also important to understand what is feasible and what is not feasible in planning. The infeasible category includes the idea that the future school facilities of the next ten or twenty years can be mapped out with precision today. School facilities decisions face many major budgetary, political, technological, educational and other uncertainties. Any set of detailed long run facilities decisions today would be based on many assumptions. Then, almost inevitably, at least some of these assumptions would turn out to be incorrect. At that point, a plan dependent on these assumptions would lose much of its usefulness--a fate already experienced by many long range comprehensive plans in other fields.

But done properly, planning is still critical. Effective planning consists of making alternative projections of student populations and assessing their likelihood; of con-

structing various configurations of schools and seeing how they would work out; of exploring alternative sequences in which new school facilities could be built; and of examining various other options and alternatives for the school system. The intent of the planner would not be to select any one of these many alternatives, but to ensure that future decisions are well informed by consideration of the alternatives.

School facilities decisions, like other education decisions, involve complex tradeoffs among many competing objectives. Where a set of BIA-funded schools constitute a system of schools, it may be desirable to develop a computer model of this school system that will allow the exploration of a wide range of school options and alternatives. Such a model might also be built to give the total costs for each alternative. Then, the decision makers could say: "if we do this, or that, what will be the impact on student populations in each school, on numbers of personnel, and on total system costs?"

Short of a full computer model of an education system, it is possible to model limited parts of the system. For example, the existing set of schools could be taken as a given, and the impacts of alternative distributions of students among existing schools could be examined. If the model is capable of calculating costs, one might ask the computer to determine the distribution of students among schools that minimizes the total costs of educating all students in the system. A still more limited model might be able to calculate transportation costs--but not other costs --for alternative attendance arrangements of all students in the system. This model might be given the task to determine the distribution of students among schools that minimize total busing and other transportation costs for the school system. The results of such modeling in themselves would seldom be definitive, but would contribute to an overall process of more informed facilities and other education decisions.

The Chinle Demonstration Study

In April 1987, the Bureau of Indian Affairs established a pilot demographic study of the school age children living within the Chinle Agency of the Navajo Reservation. The BIA has been faced, in Chinle and throughout the Navajo Reservation, with requests to support construction and renovation of school facilities to serve a changing school population. The BIA has also been requested to improve roads and bussing systems to better serve the transportation needs of area schools. These requests have been supported by poorly documented claims as to the numbers of students that would be served.

In order to plan for an efficient and cost-effective use of educational facilities, it is necessary to know the numbers, characteristics and locations of the children to be served. However, complete demographic data on existing school age children and, particularly, accurate enrollment projections to use for planning purposes do not exist for the Navajo and Hopi Reservations. The BIA therefore decided to support a project to establish a method for identifying, locating, cataloging and analyzing in-

formation on both students and children not attending school. The Chinle Agency was selected as the demonstration site for this effort.

Data collection procedures developed included an optically scannable data collection form, containing fields for entering characteristics of children (e.g., census number, name, birth date, school) and their geographic location (e.g., home, boarding facility, school bus stop). Methods were devised for collecting data from school records for students and from census records for children not attending school. Grid maps to indicate geographic locations within the agency were drawn and published. Within the reservation there are few roads with names and no street addresses. Locations of homes, boarding facilities, schools and bus stops had to be designated by a grid code number, since other location identification methods did not exist.

Data collection from all public, BIA and contract schools was done by school staffs, using the data collection forms and the grid maps. Data on children not attending school were collected from agency census records. Data for forecasting enrollment (e.g., live births, number of females) were collected from the Indian Health Service. Analysis of the data was supported by a program that both displays the data and allows for compilation of the information by single grid block, selected region, school attendance area, bus route, or by any other configuration of grid blocks. The analytical system also includes a computer modeling capability to examine assignment of various population groups to schools. This methodology makes it possible to analyze and simulate various configurations of school boundaries, school capacities, student populations, transportation routings, and grade level organizations.

BIA schools in the Chinle Agency are divided into nine regions, each generally comprising one or two of the 12 communities. The attendance boundaries of the BIA schools tend to follow topographical features and barriers to transportation. In the Agency, the BIA operates one high school and seven elementary schools. Also, three Arizona public school districts have territory within the Agency boundaries. These districts operate nine schools that serve agency students (two high schools, one junior high school, and six elementary schools). The boundaries for the public schools follow arbitrarily drawn county or section lines and do not conform to either topographical or population distribution features. The public schools are day schools, although the one major high school draws secondary students from a BIA boarding facility.

The study found that there are 6,820 children enrolled in Chinle area schools. Of these, 4,034 are in kindergarten through 6th grade, 1,202 are in 7th and 8th grades, and 1,849 are in high school. About 60 percent of the students attend public schools, 31 percent attend BIA schools and the balance (9 percent) are in contract schools. The majority of students live around the 12 communities or along the four transportation corridors. Approximately 64 percent of all students live within six miles of one of the communities. Although bus routes generally serve the residential population of the schools, there are numerous outlying regions that are not served by any transportation and several routes where public and BIA coverage overlap.

The total permanent capacity of all area schools is 8,029 students. Approximately 85 percent of current school capacity is used. Each of the 12 communities has an elementary school to serve its students. However, the capacities of schools are not distributed according to the distribution of the school population. As a result, some schools, particularly at the elementary level, are currently below 70 percent of capacity, while others, particularly at the junior high school level, are well over 110 percent.

Cohort survival rates, representing the percentage of students who progress from one grade level to the next, are relatively stable in the first six grades, where the average is close to 1.0. In elementary school, almost all students stay in school through the sixth grade. There is a modest loss in return of students to school in both 7th and 9th grades, representing the first years in junior and senior high schools. However, there is a very significant dropout rate in 10th through 12th grades, where nearly 30 percent of the students leave high school before graduation.

There were 3,596 children ages 6 through 18 identified as not being enrolled in any school, representing 35 percent of the total school age population. A significant number of all children apparently never enroll in school. By age 15.5 (grade 10), more than 50 percent of the children of that age are not attending school. By age 18, 62 percent of the children are not enrolled and presumably do not graduate from high school.

The numbers and percentages of school age children not attending school is a major problem, particularly in the higher grade levels. Since the schools are generally operating at 85 percent of capacity, it would not take a significant reduction in dropout rates to seriously impact school adequacy. For example, if 10 percent of the 525 children of junior high age were influenced to stay in school, the current junior high capacity could not accommodate the students.

Children not attending school tend to live within the same communities and along the same transportation corridors as students. However, the distribution of these children tends to be wider than for students, and they tend to live in greater numbers away from established community centers and bus routes. The "walk out" distance to bus routes may be a major factor in non-attendance for children living in more isolated areas.

The ten-year forecast for the Chinle area shows that there will be a net increase over the ten years of 2,675 students, or 42.6 percent. This growth will not occur evenly over that period, ranging from a 0.4 percent decline in 1988 to a 5.8 percent increase in 1998. Nor will that growth be uniform among age groups. Younger age groups will increase more rapidly than older groups over the ten-year period, due to an increase in the birth rate. These projections assume that no action will be taken to alter cohort coefficient (dropout) rates. If any action is taken that will tend to keep children in school, the action will have a compounding effect over the ten years which could drastically alter the forecast upwards.

Current school capacities are not adequate to accommodate forecasted enrollment beyond 1996. By 1990, the middle school capacity will be exceeded. The elementary capacity will be just adequate until 1994. Secondary school capacity will be reached by 1996; however, it must be considered that much of the current secondary capacity is in temporary or barely adequate facilities. By 1999, school capacities will have to be expanded by 100 classrooms to accommodate growth in the student population, assuming that the dropout rate stays constant.

The Chinle study successfully demonstrated a method for collecting and analyzing demographic data on Indian reservations. The information will be useful for local school officials in analyzing options for school facilities, transporting students, and funding operations. One drawback of the project was that it included an arbitrarily drawn area, the Chinle Agency. Two of the three public schools were not wholely contained in the study area, making the system only partially usable for their districts. It was clear that neither public school nor BIA attendance boundaries are adhered to by students. Moreover, there appears to be a significant migration of students between schools and no method for tracking students exists. As a result, it is very difficult to accurately collect data and analyze school age populations, when only a selected region is included. Not having comprehensive data for the entire region makes it very difficult to support systematic planning.

Planning for future school facilities depends on accurate enrollment data and projections, as well as the ability to analyze alternative enrollment patterns. Given this need, efforts are being made to extend the methods developed in the Chinle study more broadly throughout BIA education.

Aberdeen Area Facilities Study

The Office of Construction Management commissioned a 1987 study of the condition and facilities requirements of BIA-funded schools in the Aberdeen Area (covering the schools in North Dakota and South Dakota). The study included examination of past enrollment trends, likely future enrollments, the physical condition of schools, the presence of alternative public schools, and other factors. For each school in the Aberdeen Area, the report included the following data elements:

- Site Name
- Bureau Location Code
- Agency Affiliation
- Current Administrator
- School Type (Bureau or Contract)
- Grades Offered
- Total Enrollment
- Date of Survey

- Current Enrollment of Grade
- Enrollment History
- Projected Enrollment
- Design Capacity
- Expansion Plans
- Projected Enrollment Changes
- Physical Condition of Facility
- Estimate of Cost of Upgrading Facility
- Public Schools Within 25 Miles

The study further yielded the following key findings. During the 1980s, the decline in the agricultural economies of North and South Dakota has led to a shift of Indian populations away from rural areas and towards the more urbanized parts of the two states. As a result, the more isolated schools (usually small) have tended to have stable or declining enrollments. Some BIA-funded schools near or in urbanized areas have experienced a growth in their student populations. If further population movements of these kinds occur, the pressures of growing student numbers on some schools may create a strain on student capacity and possible needs for new BIA-funded facilities in these areas.

The study found that by and large the physical condition of BIA-funded schools in the Aberdeen Area was good. There were some superior facilities that would be outstanding in any school system in the United States. There were also some facilities, however, that showed signs of aging and had significant physical problems that would require future attention. The study found that in the great majority of cases the existing requests that had been made by schools for facilities improvements were reasonable--that a well-run and adequately funded school system should act promptly to deal with them.

The study found that accurate data and information were difficult to obtain and that record keeping was sometimes loose. Field inspection shows that the FACCOM data on physical space available in individual schools is accurate for some Aberdeen Area schools but very inaccurate for others. The information requirements for effective school management are often not being met.

Some potential was found for school consolidation. In some cases, several BIA-funded schools are in fairly close proximity, where one or more schools may be underutilized and/or in poor physical condition. There might be educational gains, as well as more efficient use of facilities space, resulting from consolidation.

Overall, it was recommended that 28 schools should be kept open and retained in their present circumstances. In two cases, it was recommended that three separate

schools should be consolidated into one school and in one case that two schools should be consolidated. A need to convert two boarding schools to day schools was identified. The construction of one new school was recommended. And, finally, the closing of one school was recommended.

The Aberdeen Area study is an example of a process whereby detailed information on specific schools is assembled and then examined from the perspective of a regional school system. Such a process seeks to anticipate future school needs and to plan for ways of best meeting them. Such planning necessarily must be conducted in the locality or region where the schools are located. In some cases an Agency set of schools, rather than the schools within a BIA administrative area, may be the most appropriate grouping for planning. The BIA may want to extend the approach of the Aberdeen Area study to appropriate groupings of other BIA schools.

Making Future Facilities Decisions

In making facilities decisions, it will be important to perform an assessment of the facilities alternatives available and of the educational and financial impacts of these alternatives. It is never possible, however, to have all the information and knowledge that in an ideal world might be desired. Economic considerations enter into the acquisition of information and the conduct of analyses, just as they enter into other matters. At some point it becomes necessary to do a benefit-cost analysis of planning itself. Hence, the BIA faces some decisions on the kinds of information it will acquire for facilities decisions and the amounts it is willing to spend.

In a perfect world, each facilities decision would be examined individually and the decision made strictly on its own merits. In practice, however, it is sometimes desirable to establish fixed rules and guidelines, even though these rules and guidelines may not fit every situation precisely. The BIA, for example, is considering whether to establish a fixed rule that no school with less than 100 students can be built. Among the trade-offs, in some cases this rule could be very costly to the Federal government, because the alternative would be to send students to a boarding school, when a small and much less expensive day school could adequately serve them. Any fixed rule will be insensitive to local variations in such trade-offs.

This chapter has identified types of information and analysis needed in making facilities decisions and some possible ways of obtaining them. In setting a framework for making future facilities decisions, the following options can be considered:

Option 1: Develop a standard set of educational and financial impact studies that will be required before making any major facilities decisions. These studies should explore adequately the main facilities alternatives and their impacts on BIA student learning, budgets and other key matters.

Option 2: Take action to improve the quality and reliability of the data in the FACCOM system.

Option 3: Provide tribes with planning grants to study the possibility that new tribally sponsored public schools might maximize the revenues (Federal and state combined) available to reservation schools, as compared with a new or substantially renovated BIA school.

Option 4: Seek to establish coordination mechanisms with public school districts, so that BIA facilities decisions can be coordinated with public school facilities actions and educational policies.

Option 5: Develop a special process to identify candidate schools for consolidation and initiate planning and impact studies, along with a public participation process, for those schools so identified.

Option 6: Develop a computer model for each BIA school district that can show the tradeoffs among student school populations, total school system costs, transportation costs and student time spent in transportation, among other outputs of the model.

Option 7: Following the results of the Chinle study, develop a computer model for each BIA school district for the transportation of BIA students, showing total transportation costs, student bus times and other transportation elements.

Option 8: Establish a requirement that each local BIA school system must prepare a long-run program analysis every five years, analyzing key problems and policy issues facing the district, reviewing alternative resolutions, and setting new policy guidance.

Option 9: Adopt a fixed rule that no new school of less than 100 students will be built.

Option 10: Adopt a fixed rule that no new boarding schools will be built.

Conclusion

Facilities decisions are closely linked to the setting of broader education policies. It is especially important, for this reason, that BIA develop improved mechanisms for exploring facilities alternatives, including an examination of the educational and financial impacts of different facilities arrangements. Such an examination should be a central element of a broader facilities planning process.

Yet, it is also important to be realistic about what facilities planning can accomplish. Effective planning can lead to better informed decisions. It can lead to the development of new and superior alternatives. However, planning will not be able to produce a detailed blueprint of future school facilities that will resolve facilities issues for many years to come. Planning also will not be able--nor should it try to--supplant the political process with give-and-take bargaining and necessity for compromise characteristic of American democratic decision making.

CHAPTER IX

The Leadership Challenge Facing BIA Education

Students of effectively managed organizations have often found, as Thomas J. Peters and Robert H. Waterman recently wrote in their book, *In Search of Excellence*, that "the excellent companies are the way they are because they are organized to obtain extraordinary effort from ordinary human beings. It is hard to imagine that billion-dollar companies are populated with people much different from the norm for the population as a whole."[1] The vital ingredient in obtaining such successful organizational results is leadership, first in building and then in sustaining the organization. Moreover, leadership is often misunderstood as the power to command. Instead, leadership has more to do with the ability to inspire and to motivate. It is the ability to set a realistic goal, define objectives and then to focus the efforts of many men and women on the achievement of these objectives in a timely manner. It is an ability that also cannot be captured easily in any simple formula. As Peters and Waterman go on to explain:

> Leadership is many things. It is patient, usually boring coalition building. It is the purposeful seeding of cabals that one hopes will result in the appropriate ferment in the bowels of the organization. It is meticulously shifting the attention of the institution through the mundane language of management systems. It is altering agendas so that new priorities get enough attention. It is being visible when things are going awry, and invisible when they are working well. It's building a loyal team at the top that speaks more or less with one voice. It's listening carefully much of the time, frequently speaking with encouragement, and reinforcing words with believable action. It's being tough when necessary, and it's the occasional naked use of power or the "subtle accumulation of nuances, a hundred things done a little better."[2]

If there has been any single most critical deficiency in BIA education in recent years, it has been the short supply of such qualities of leadership. The reasons are complex, and nothing is gained by assigning blame to any individual or group. Indeed, Congress, the executive branch, the tribes, the judiciary and others have all played a part in undermining the powers and effectiveness of leadership in BIA education from the Central Office in Washington, D.C. to the leadership at the local school level. During the 1980s, there has seldom even been an officially installed director of the

Office of Indian Education Programs (OIEP). For five out of the past six years, the directorship of OIEP has been filled on an acting basis.

It is no secret that BIA education is today an organization lacking in a sense of direction. Its most productive members often feel that any successes they achieve occur despite the system, rather than with its support. Collegiality, the act of putting aside vested interests and working for the good of the whole, is found in America's best educational institutions, but is often missing in the BIA system, where administrators are sometimes more interested in shoring up and expanding their administrative domain. The attitude promoted is not one of organizational effort towards a common goal but of individual survival. Historically, emphasis has been placed on administrative conformance. A few people give up entirely, while others do their best without great expectations. Pockets of high achievement and accomplishment can be found, but these may appear as exceptions in a system that may not recognize and too often does not reward the efforts of its best performers.

One might interpret the lack of direction and leadership of BIA education as the declining symptoms of an organization that is near the end of the line. Perhaps tribal schools and/or public schools will be assuming greater responsibility for Indian education in the not-so-distant future--basic alternatives that were raised in Chapter VII. Some observers also suggest that a degree of tension may exist between the goal of strong BIA leadership and the goal of tribal self-determination. However, if BIA schools are to continue to educate significant numbers of Indian children, providing these children with a better education will require an assertion of strong leadership by effective leaders. In this chapter it will be assumed that an energetic and capable administration of BIA education is in fact an objective of government policy.

The task is not easy. Indian education in the BIA system lacks a sense of purpose partly because the Indian community is so diverse and includes widely varying expectations and demands of the BIA system of education. Both the Congress and the judiciary have shown a growing willingness to direct and manage even the lesser administrative details of BIA education. Within the executive branch, BIA education must deal with the pressures and views of OMB, Department of Interior offices, the Department of Education and other parts of the BIA. To get all these forces to pull together behind some common vision and purpose is, to say the least, a difficult challenge.

The challenge inevitably begins at the top of OIEP. The Director of OIEP must be willing to put forth a vision for transforming the organization toward achieving excellence at all managerial and instructional levels. To do so, the Director will have to implement sound management principles, establish an environment of collegiality in the organization, and, to quote Lord Beveridge, " make common men do uncommon things."[3] In normal times, top leadership may be able to keep a successful organization going without inspirational efforts. But when an organization needs a basic redirection and renewal--as numerous people believe is the case for BIA education today--a different and higher set of demands are placed on leadership. Waterman

and Peters write of "transforming leadership" which is "leadership that creates institutional purpose." They explain further: "We are fairly sure that the culture of almost every excellent company can be traced to transforming leadership somewhere in its history."[4] The characteristics of such visionary leadership have attracted much attention:

> [James McGregor] Burns speaks most convincingly of the leader's need to enable his followers to transcend daily affairs. He begins by faulting earlier students of leadership for their preoccupation with power, suggesting that such attention blinded them to the far more important task of instilling purpose....In essence, Burns says, "Leadership, unlike naked power wielding, is thus inseparable from followers' needs and goals."[5]

Similarly, a practical definition of leadership is offered by management sage, Peter F. Drucker:

> Leadership is the lifting of man's vision to higher sights, the raising of a man's performance to a higher standard, the building of a man's personality beyond its normal limitations. Nothing better prepares the ground for such leadership than a spirit of management that confirms in the day-to-day practices of the organization strict principles of conduct and responsibility, high standards of performance, and respect for the individual and his work.[6]

Without some significantly greater exercise of leadership, the BIA school system will almost certainly continue to fail many of its students. Recent educational research has shown that effective schools almost always have strong and effective principals. The same holds for an entire school system such as BIA's; the effectiveness of the system depends significantly on the effectiveness of its principals and its top-level leadership. Obtaining high quality leadership and providing a security of tenure and other prerequisites for the continuing exercise of this leadership are thus vital tasks facing BIA education.

The enactment in 1978 of P.L. 95-561 largely removed the BIA Area offices from the administration of Indian education at the local school level. Congress saw the Area offices as the bastion of an old guard within BIA that was resisting the move toward Indian self-determination. Seeking to dilute or remove this source of resistance, Congress required that the line of authority run from the individual school to the BIA Agency Superintendent for Education and then directly to the BIA Office of Indian Education Programs (OIEP) in Washington, D.C. Strong leadership will be required at all three of these levels if BIA education is to show a new sense of purpose and direction--a purpose and direction that will ultimately impact the quality of the learning environment in the classroom.

Congress in 1978 also mandated a greater role for local Indian school boards. Stronger leadership by these school boards will also be a necessary part of any future major improvements in BIA education.

Washington Headquarters: Central Office

There are some functions within BIA education that almost have to be located in Washington, D.C. These include preparing and providing testimony, reports and other dealings with Congress; the development of the BIA education budget as part of an overall BIA, Interior Department and OMB budget; coordination with the Department of Education; arranging for legal defense by Interior and Justice Department attorneys; and a number of other activities that involve dealing with Washington-centered bureaucracy, media and politics. Given the importance of these responsibilities, it would be difficult to locate these functions of the Central Office outside Washington.

However, there are also some Education program functions now headquartered in Washington, D.C., that might best be relocated to the field in order to be nearer to high concentrations of BIA-funded schools (90 percent of students in BIA-funded schools are located more than 1000 miles west of Washington, D.C.). Elementary/Secondary, Exceptional Education, Research/Evaluation and Chapter 1 are examples of some of the programs whose specialists might better serve the technical assistance needs of local schools and tribes, as well as OIEPs instructional goals and program mandates, by being field-based.

Besides the special responsibilities that come from being part of the Federal government, the Washington office of BIA education has other duties that are common to central headquarters of all organizations. OIEP must define the broad role and purpose of BIA education and how this role and purpose are affected by the diversity of tribal educational expectations accompanying Indian self-determination. The Central Office must communicate this understanding throughout BIA education and help to motivate superintendents, principals, teachers and other educational personnel with a dedication and commitment to the purposes of the organization.

The Central Office has the fundamental educational task to study the latest developments in American education and to communicate relevant new ideas and trends to BIA teachers, program staff and other OIEP education personnel. Such new educational developments then can be adapted to fit the needs particular to a BIA classroom so as to enhance student learning. The Central Office has the further responsibility to establish throughout the BIA-operated school system an environment that encourages active participation and innovative leadership, whenever possible, from staff in the areas of Indian education research and practice.

Particularly at the national level, staff should be encouraged to engage in applied research (research that can impact on the quality of teaching and learning taking place in the classroom), to read and perhaps write for education journals, and to prepare

presentations for professional education meetings. Presently within OIEP, little or no incentives have been established to motivate staff to conduct research or even to follow the latest developments in education research. For OIEP educators who attempt to be professionally active in the Indian education field, beyond the day-to-day duties prescribed by their job descriptions, these efforts have had little impact on their performance ratings.

Assembly of facts and figures that show a picture of the current state of BIA education or trends over a period of time is another Central Office responsibility that has not been systematically met. Research, program analysis, and planning studies are on-going and centrally performed in most successful educational and noneducational organizations. Centrally planned data collection, research, planning and policy analysis has been much neglected by OIEP at the national level.

In theory, the Central Office sets goals for the field, monitors the achievement of these goals, and then rewards and encourages those field personnel who succeed, while seeking to help further and improve the efforts of those experiencing difficulties (or eventually removing them, if all else fails). In practice, however, goals are seldom set, monitoring is conducted usually via mail, and rewards for outstanding staff performance are infrequently acknowledged.

The selection of key field personnel is one of the most important tasks of BIA education. Wise selection of competent personnel for specific supervisory positions requires a well-established applicant pool and a network of BIA and non-BIA contacts who are familiar with qualified applicants.

At present, OIEP has 40 authorized positions of which only 29 were filled in November 1987 (on even an acting basis). Given their current numbers and skills, many OIEP staff are simply overwhelmed by the burden of their jobs. Collectively, they are often unable to perform at a reasonable level the tasks that are appropriately expected of the Central Office for BIA education. The promulgation of regulations is long delayed, sometimes for many years. Statutorily mandated monitoring by Central Office of local school academic and dormitory programs, intended to be conducted on-site, has yet to take place. Legally required reports to Congress on the status of Indian education have not been prepared at all in some years, and when prepared have lacked basic data, information and analysis. OIEP in Washington, D.C. is at present failing to exercise the instructional and management leadership role that is its proper function.

Not surprisingly, the solutions to OIEP management problems are not simple. OIEP needs to obtain greater output from its personnel, partly by focusing on those critical tasks that will do the most to establish and then advance the educational goals of OIEP. Some program and research responsibilities now handled unevenly and ad hoc from Washington might best be transferred to a field center for applied research and planning where daily communication with the Washington office could still be maintained through electronic mail and other existing technologies.

Even with greater productivity from staff and locating Central Office programs according to functions they provide, it could prove to be the case that the current staffing is insufficient to carry out the goals of OIEP. It may be necessary that OIEP receive greater resources through the filling of positions now vacant or positions redefined according to an assessment of OIEP personnel needs.

In seeking to reinvigorate OIEP leadership of BIA education, the following options can be considered:

Option 1: Create and adequately staff an OIEP office or center (in Washington or in the field) of applied education research, reporting directly to the Director, which would conduct research into matters affecting BIA education, monitor Agency programs, develop and analyze educational plans, establish databases and emphasize the communication of research results to schools in the field. Such an office or center might have a cooperative relationship with a major university.

Option 2: Develop functional statements for all OIEP staff so that each staff person will know their specific role and associated responsibilities in properly performing their job.

Option 3: Create and adequately staff a branch of BIA education personnel, which would review performance of teachers, principals and Agency superintendents throughout BIA education; help to devise better measures of performance; establish an automated recruiting pool of qualified applicants for supervisory positions, and make recommendations on personnel recruitment, advancements, and promotions.

Option 4: Bring new ideas and approaches into OIEP by recruiting personnel for OIEP from new sources such as public schools; education programs of colleges and universities; tribal governments; public interest groups; business education programs and other currently untapped sources of capable personnel.

Option 5: After assessing personnel needs, fill some or all of the vacant positions (or newly redefined positions) currently assigned to OIEP.

Option 6: Establish an educational board of expert advisors to OIEP with members from existing schools, academic institutions, government agencies and other sources -- all such members to have significant expertise in educational research and/or practice.

Option 7: Establish an Indian advisory board to OIEP with leaders from tribal governments and the Indian community generally.

Option 8: Establish and use a program whereby qualified university students, practicing teachers and principals, and others with relevant expertise can spend time in OIEP in Washington on details or internships, as appropriate. Periodically, select

OIEP Washington staff who would professionally benefit from time spent detailed to a position in the field.

Option 9: Establish and put to regular use an awards and honors program whereby outstanding OIEP personnel are publicly recognized, given high performance ratings, and awarded cash bonuses, step increases, grade promotions and other monetary compensation.

Option 10: Establish a career ladder for newly developed OIEP positions and selected existing positions by using grade level increments: GS 11/12/13, GM 14/15, for example.

Option 11: Take necessary actions to reduce the number of OIEP positions filled on an acting basis. However, reserve some vacant positions to be filled on a rotating basis as a method to provide staff with practical training and the opportunity for professional development.

Option 12: Conduct a major reorganization of OIEP at theWashington level. New positions and reassignments would be determined after restructuring functions, responsibilities and geographical locations of OIEP positions which would be more in line with the current education needs of the organization.

Option 13: Establish a policy of all OIEP supervisors conducting scheduled staff meetings within the Central Office in order to improve communication among staff and the overall esprit de corps of the organization.

Option 14: Develop an OIEP operating procedure for Central Office to assess training needs of all Agency professional staff and to subsequently assure that needed training of Agency staff is completed within a mutually determined time frame.

The Agency Superintendent for Education

Within the BIA education system, OIEP might be seen as having a role comparable to that of a state Department of Education within the public school system for an entire state. After OIEP, the next rung down in the line of BIA administrative authority is the Agency Superintendent for Education (ASE) or the Area Education Programs Administrator (EPA). (The two positions, together called Line Officers, are essentially identical in responsibility and authority.) Pursuing the analogy with a state system, the ASE or EPA might be seen as similar to the Superintendent of Schools of a small town, county or other locality.

There are 21 ASEs within BIA education who are collectively responsible for the administration of a total of 132 schools and dormitories. (Additionally, a total of 50 schools and dormitories are administered by 12 EPAs located in the BIA Area offices.) Thus, each superintendent has an average of 6 schools to oversee. The num-

ber of schools ranges from a maximum of 18 schools in the Eastern Navajo Agency to a minimum of one school in the Laguna Agency.

The Agency Superintendent for Education has the responsibility (with the school board) to select principals; assist the principal (and school board) in the recruitment of teachers; monitor curriculum and other instructional developments; and generally to play an oversight role for the BIA schools within that Agency. The superintendent is responsible for setting standards of student achievement and holding principals and teachers in each school to these standards. By exercising strong leadership, or failing to do so, the Agency Superintendent for Education can set the tone for the quality of BIA education throughout the Agency.

The level of leadership shown by Agency superintendents in practice varies from Agency to Agency. Some superintendents have set high standards and held the local BIA school system accountable to those standards. Others seem to regard day-to-day compliance with the bureaucratic demands as the most that can be expected. The task of superintendents is made more difficult by the meager fiscal resources available to many of them to hire key specialists. Most of the Agencies do not have a curriculum, bilingual, research, personnel, contracting or procurement specialist. Lacking such staff, the ASE; typically finds it difficult to devote time to long range instructional strategy and administrative leadership and instead must devote the great majority of time and energy to routine processing of forms, ordering of materials and other practical tasks.

If the position of Agency Superintendent for Education is to be assigned a fully functional leadership role, the following options can be considered:

Option 1: Revise job performance standards of Agency Superintendents for Education to ensure that their ratings reflect closely the degree of learning actually achieved by students in their Agency--as measured by test scores, criterion-referenced results, grades, attendance rates, maintenance of safe and orderly schools, and in other ways.

Option 2: Institute special training courses and sessions--during the school year and/or during the summer--for Agency Education Superintendents in effective schools, administrative, personnel, effective writing, computers as a management tool and other matters relevant to their job performance.

Option 3: Provide additional staff positions to assist Agency Superintendents in areas such as curriculum, teaching methods, personnel, etc.; or establish regionally-based technical assistance centers to supply Agencies and their schools with the needed education program expertise.

Option 4: Revise the recruitment standards for Agency Superintendents for Education to allow the hiring of new Superintendents with past experience that clearly demonstrates strong capacities for leadership (e.g., in business, government or other arenas) but who may lack educational credentials currently required.

Option 5: Institute semi-annual meetings of the Director of OIEP with all Agency Superintendents for Education, in order to review jointly the status of student educational progress in each Agency, as well as progress towards broader BIA education goals.

Option 6: If specifically and individually approved by the Agency school board and/or tribal council, allow the waiving of Indian preference requirements in the hiring of an Agency Superintendent for Education (thus going beyond the current rules of allowing waivers only for BIA employees who are nonIndian).

Option 7: Balance the work load among the Agency Superintendents for Education, which might necessitate some Agency realignments.

Option 8: Encourage superintendents to participate fully as community members in the tribal community in which their Agency Office is located. Establish a policy to assure that superintendents promote community involvement among the principals under their supervision.

The BIA Principals

Research on effective schools has shown that they very frequently have principals who demonstrate strong leadership qualities. The principal, more than any other person, defines and sets the character of the learning environment of the school. If the principal does not enforce the rules and insist on student adherence to them, then it becomes difficult to sustain an orderly school environment conducive to learning. It is the principal above all who needs to insist on high standards of achievement for students and teachers and to communicate the firm expectation that these standards will be met. Some BIA teachers seem to begin with the expectation that their students will do poorly. The principal is the central figure in reversing the vicious cycle of low expectations, low achievement, still lower expectations, and a continuing downward educational and psychological spiral.

There are today a number of outstanding principals in BIA schools. However, on the whole, the high level of creative and energetic leadership required to significantly improve BIA schools has not been forthcoming. Some principals regard their role as an administrative caretaker rather than as the school leader in charge of instruction. Matters of budgets, personnel, facilities and other administrative tasks, rather than education itself, preoccupy too many principals. The principal should instead be a fully competent leader of a common educational undertaking involving a whole community of teachers, parents, and students--and should be seen by all concerned in this light. This educational community should look to the principal to articulate its goals and values and the means that will be followed to achieve each of them.

At present, however, many principals face circumstances almost certain to frustrate this aim. Many schools are remote and isolated. Non-Indians in many cases are not prepared to live at these isolated schools in BIA housing for long periods. The BIA

schools in fact have an extremely high rate of turnover of principals. Of 75 BIA schools that responded to a recent questionnaire distributed by OIEP, fully 25 schools, or 33 percent, indicated that the current principal had been in this position for one year or less. With turnover at this rapid rate, effective leadership by principals is simply not possible.

The hiring of BIA principals, like teachers, is a joint undertaking involving the Indian school board and the Agency Superintendent for Education. The BIA solicits applications for principal positions and then refers qualified applicants to the school board. The board then makes a recommendation to the ASE. If the ASE does not choose this applicant, but instead selects another applicant, a formal explanation must be provided to the Board. In practice, the Agency Superintendent for Education and school board usually work out an agreement informally for the selection of the principal.

The BIA is seeking to expand not only the number of Indian teachers but also the number of Indian principals. Of the BIA schools responding to a question on the recent OIEP questionnaire concerning the background of the principal, 61 percent had Indian principals. A principal with a background in the local Indian community will have cultural knowledge and personal contacts that may be a major asset in working with the community. However, it is also possible that an Indian member of the local community will have been involved in past political and other disputes that can complicate the exercise of leadership and school management by the principal. It is also true that an Indian principal from one tribe may have some difficulties in dealing with a local Indian community from a different tribe.

If the BIA is to seek more vigorous leadership from its school principals, the following options can be considered:

Option 1: Create an OIEP task force to review and, where feasible, cut back on reporting requirements, paperwork burdens and other routine duties that limit the ability of principals to focus on improving educational results themselves.

Option 2: Institute regular and intensive training programs for all BIA principals in the Effective Schools methods used by successful schools and strong school leadership including sessions during the school year and/or summer sessions. Conduct supplemental training for any principals requiring work on improving writing, communication and computer skills.

Option 3: Institute an annual meeting of all BIA school principals with the OIEP Director, in order to discuss common school problems and the achievement of BIA educational goals.

Option 4: Revise the required personnel qualifications for BIA school principals, in order to allow selection of individuals with strong demonstrated leadership qualities who may lack the full educational credentials currently required.

Option 5: Initiate efforts to expand the applicant network from which BIA principals are recruited and selected--looking to universities, public schools, tribal administrators, business educators, public interest groups, and other potential sources of BIA principals.

Option 6: Revise the performance standards for BIA principals to deemphasize administrative tasks and to base the performance rating of the principal to a greater extent on the measured educational (instructional) success of the school and the degree of achievement of its students.

Option 7: Develop a program to select a pool of prospective future principals within BIA education, and then provide special intensive training and evaluation of these candidates from whom later selections of principals could be made.

Option 8: Allow the local Indian school board and/or tribal council to waive Indian preference in the selection of BIA school principals (going beyond already existing school board authority to waive Indian preference only for BIA employees who are nonIndian).

Option 9: Revise the grade level and corresponding salary schedule for principals in order to attract higher quality applicants and to reduce the high turnover rate of principals.

Option 10: Develop a program of public awards and honors for outstanding efforts by BIA principals, including cash bonuses, step and grade increases, and other monetary compensation. Establish a newsletter to describe and share outstanding efforts of BIA principals and their staff with others in the system.

Option 11: Develop a program whereby successful BIA principals with stories of outstanding accomplishments are sent to visit other BIA schools and in other ways given the opportunity to communicate the reasons for their successes throughout the BIA education system.

Option 12: Conduct an in-depth, longitudinal study to determine the causes of high principal turnover in order to correct the problem.

Option 13: Using existing interactive computer and satellite technology, establish a network of BIA and non-BIA principals to facilitate their sharing of information and resources to help them to be ultimately more effective at the local school level as the school's chief administrative and instructional leader.

Local School Boards

Local school boards are also a critical part of the leadership and administration of BIA education. They are a more recent part of the system, in many cases acquiring real influence only in the past decade. During this time, significant concerns have

evolved with respect to the operation of local school boards and the leadership role that they must play in BIA education.

Local tribal control of Indian education programs is not a new Federal aim. In 1928, the Meriam Report recommended that "Indians should be serving on school committees in the day school as a means of enlisting their general interest in all that involves the child's education and development, and also as a gradual preparation for service on boards of education."[7] But it was not until the 1960s that any real follow-up occurred to this recommendation. In 1966, BIA's "Project Tribe" began the process of contracting school programs to tribal groups. School boards were set up in newly contracted schools, as well as several BIA-operated schools. In 1967, the National Indian Education Advisory Committee (NIEAC) was established with a 16 member board representing tribes from across the country. It provided the BIA with some of the first sustained, representative tribal input in making educational policy, establishing instructional criteria and designing academic standards for BIA schools.

However, the new advisory school boards could only advise and not take action to bring about program changes. School boards had to rely on the goodwill of the school administrator and in many cases felt that their advice was insufficiently heeded by administrators. Many principals seemingly retained the view that they knew what was best. As a result, Congress formally enhanced the powers of school boards in a series of 1970s bills affecting Indian education culminating in Title XI of the Education Amendment Act of 1978, or "561" as it is popularly called. This Act empowers tribes to realize more effective control over their schools through oversight responsibilities given to local school boards, including:

- The right to recommend to the Agency Superintendent for Education and to the Director of OIEP that a principal or other school system employee be discharged. (Superintendent is not required to comply with recommendation.)
- The right to recommend against the dismissal of a school employee that a supervisor intends to discharge. (Supervisor is not required to comply with board's recommendation.)
- The right to recommend contract employee applicants for specific positions. If the immediate supervisor disagrees with the board's choice, the supervisor must appeal in writing to the Agency Superintendent for Education, who is empowered to make the final choice.
- The authority to waive on a case by case basis BIA requirements for hiring teaching staff when the applicant is a tribal member and is applying for a tribal culture/language position.
- The authority to ratify, reject or amend the financial plan developed by the school administrator.

The tribal governing body can also delegate to the school board two additional powers:

- The right to waive all or parts of the BIA's Minimum Academic/Dormitory Standards and the right to revise such standards.
- The power to waive Indian preference on a case by case basis for non-Indian applicants applying for a contract school position.

Under "561," BIA is required to provide school boards with training. In the first year of implementation, each school board received $5,000 for this purpose. In 1984, Congress further mandated that BIA provide board training on a national and regional basis. The BIA contracted the training responsibility for the Navajo to the then-62-member Navajo School Board Association to conduct workshops, often in the Navajo language (to accommodate the non-English speaking board members) on the Navajo Reservation. The Association of Contract Tribal Schools provided training for 63 tribally contracted schools and the National Indian School Board Association (NISBA) offered training to the remaining non-Navajo, noncontract BIA schools. The workshops have proven generally successful, covering a wide array of subjects that include boardmanship, curriculum, facilities, special education, student rights, stress management, academic/dormitory standards, finance, personnel, and accreditation.

Since 1980, the extent and quality of school board participation in BIA education has grown significantly. However, even with training, a board member will sometimes remark that he or she did not realize that a board "could do that." A few school boards still function as rubber stamps for decisions made by BIA administrators. The boards themselves have not all been diligent in the exercise of their board responsibilities. Board membership is sometimes seen more as a political reward for the member, rather than an opportunity to serve the tribal community and its educational needs. Too often, communication of important educational issues has stopped with the school board members themselves.

Future efforts to improve BIA schools will be most likely to succeed if they represent a partnership between the BIA and tribal communities. Improvements in the leadership of BIA schools will not yield their full potential, unless there are improvements in school board leadership as well. Ultimately, the responsibility for these improvements rests with the school board members and in the tribal community itself. There is only so much that BIA can do. However, there are a number of options for actions that BIA might take to assist school boards in the exercise of their critical leadership role.

Option 1: Review existing technical assistance programs for school boards and provide greater funding, if needed, in order to assist school boards in fulfilling their leadership role.

Option 2: In addition to school board members, develop a program to train interested parents and other community members to become involved in school management.

Option 3: Establish a BIA-wide policy that actively encourages local schools to invite parents, board and other community members to observe classroom learning and teaching.

Option 4: Emphasize tribal community involvement in the job performance standards and evaluations of Agency Superintendents for Education and school principals.

Option 5: Adopt a formal BIA-wide policy that all school test scores, outside expert evaluations and other relevant information on school performance must automatically and promptly be transmitted to each local school board member.

Option 6: Develop a two-week summer training program bringing together new (and existing, if they wish to attend) school board chairmen for all BIA and contract schools around the Nation.

Option 7: Provide a discretionary account not to exceed an average of $15,000 per year for each local school board to hire independent outside expertise to evaluate school performance and to advise the board on the exercise of its responsibilities. BIA would review the use of this account only to ensure against fraud or gross abuse.

Option 8: Require each school principal to prepare an annual summary report (say 20 succinct pages) on the test scores, budgets, personnel changes and other matters affecting the local school. This report would include policy options for further review and consideration and would be given to each school board member, as well as distributed to any other community member requesting it.

Option 9: Review the rules for electing school board members, the length of terms on the board and other basic structural elements in search of new arrangements that might better ensure that school boards provide effective representation for parents and tribal members.

Option 10: Hold a conference every two years to which all school board members would be invited. This conference would bring in teaching, financial and other educational experts to address board members.

Option 11: Fund a program to establish better consultation and coordination between local school boards and teacher colleges at institutions of higher education within the state. School board members might receive specific training and/or more general advice through such a program.

Option 12: Provide school board members with requisite on-site training on how to assess performance of school personnel, particularly school principals. School board members need to recognize the leadership and managerial qualities necessary to establish and maintain an effective school.

Conclusion

The BIA school system is suffering from a lack of leadership at all levels--OIEP (national), Agency Superintendent for Education (district), and school principal (local). The frustrations of past efforts to improve the system, combined with major bureaucratic obstacles to innovation, yield an attitude found today among too many BIA employees of passive acceptance. Too many responsible officials in BIA education do not seek to lead but merely to get by from day to day. Changes in these attitudes and in this environment are a prerequisite to making major improvements in BIA education. The combined efforts of BIA administrators, Congressional leaders, tribal officials, outside academic and other researchers, and others involved in Indian education will be necessary to bring about the needed changes. The ability to obtain more decisive, energetic, informed and committed leadership will determine whether BIA-operated education has a future.

FOOTNOTES TO CHAPTER IX

1. Thomas J. Peters and Robert H. Waterman, Jr., *In Search of Excellence* (New York: Warner Books, 1984--original edition 1982), p. 81.

2. *Ibid.*, p. 82.

3. Cited in Peter F. Drucker, *The Practice of Management* (New York: Harper & Row, Publishers, 1986), pp. 144-5.

4. Peters and Waterman, p. 82.

5. *Ibid.*, p. 83.

6. Drucker, pp. 159-60.

7. Meriam, Lewis, et al., *The Problem of Indian Adminstration* (Baltimore: Johns Hopkins Press, 1928).

PART III BUILDING EFFECTIVE INDIAN SCHOOLS

CHAPTER X

The Characteristics of Effective Schools

The problems of BIA and Indian education are a small part of a much broader issue facing American education today--the education of all types of disadvantaged and minority students. In disproportionate numbers, minority students perform poorly according to the conventionally accepted measures of educational achievement. They do poorly on nationally standardized tests, have lower grades and generally seem to have greater difficulty in mastering the skills and knowledge expected of a person of their age and status in school.

Concerns about the state of education in the United States also have not been limited to the schools that serve poor and minority students. Declining test scores, along with other evidence of basic deficiencies in student knowledge, have been found even among many students from the most advantaged American populations. Test scores on the Scholastic Aptitude Test (SAT) for all groups declined from an average U.S. verbal and mathematical total of 958 in the 1966-67 school year to 890 in the 1980-81 school year. There has been a renewed national interest in the problems of American education and a greater commitment to try to resolve these problems. The publication in 1983 by the U.S. Department of Education of *A Nation at Risk* served in many ways to highlight and bring this development to wide public attention.[1]

One consequence has been to stimulate new research into the educational methods and policies that produce effective schools both for minority students and non-minority students alike. Educational researchers had gradually become aware that there were a limited number of schools, some of them serving highly disadvantaged minority populations, that seemed to be successful. These schools were educating their students effectively even when most of their fellow schools with similar student populations were faring very poorly. Further inquiry revealed that these schools tended to have a number of characteristics in common. Indeed, as educational researchers have probed those schools that have successfully served "at risk" student populations (students from low-income, "minority" families), a broad area of agreement has emerged on the reasons for their effectiveness.

Researchers and administrators in U.S. education have sought to disseminate the findings about effective schools and to encourage their application. In a recent publication of the U.S. Department of Education, *Schools That Work: Educating Disadvantaged Children*, the Department found that "much of this research, which laid the

groundwork for the recent educational reform movement, was carried out in schools serving poor neighborhoods. Although the research methodology in some of these studies has been subject to debate, agreement has emerged on a broad set of factors that characterize effective schools."[2]

In the research on effective schools, Indian schools have not had a principal role. The issues of Indian education by and large fall outside the mainstream of educational research in the U.S. Thus, the prescriptions developed for effective schools have not been tailored specifically for the problems of Indian schools. Yet, there has been some linkage between Indian education and the effective school movement. A 1985 study, *Effective Practices in Indian Education*, was produced by the Research and Development Program for Indian Education of the Northwest Regional Education Laboratory.[3] The authors of this study found that effective educational practices developed for nonIndian disadvantaged populations also worked well--if perhaps needing some modification--in the special circumstances of Indian education.

The discoveries of educational researchers with respect to the characteristics of effective schools are not altogether new. Indeed, in some of its conclusions the effective school movement represents a new attentiveness to educational truths whose importance has long been known but perhaps had been neglected or partially forgotten in recent years. However, it is no less important to reemphasize this knowledge of which recent educational research has demonstrated and reconfirmed its viability and relevance. The distinguishing characteristics found by students of existing effective schools offer a set of guidelines that may be usefully applied in the future to pressing problems of BIA schools.

1. Effective schools have high expectations for student success.

Researchers into effective schools have found that the expectations of teachers can greatly influence what students actually accomplish. If school officials and teachers expect little of their students, these students will tend to confirm these expectations. Even if teacher attitudes are never explicitly stated, many students can sense a lack of confidence in them on the part of their teachers. Responding to lower standards, disadvantaged students may never be pressed to their capacities for learning. The U.S. Department of Education reports that "many disadvantaged children who fall behind never catch up. Research indicates that schools often limit the opportunities for these students. They are exposed to far less academic coursework than other students, and within the subjects they do take, they are not taught the reasoning skills needed to progress."[4]

Poor and minority students thus suffer on two counts. Coming to school lacking the educational advantages of middle-class children, teachers often respond by lowering standards and expectations. Minority students thus are not required to stretch themselves to realize the full capacities for learning that they may possess. Some students may even suffer the cruel fate of discovering later in life that, although having done

all that their schools asked of them, they still lag well behind middle class peers who attended more demanding and rigorous schools.

Thus, teachers do their disadvantaged students no favors when they ask less of them. Teachers may also in this way exhibit a lack of confidence in themselves. By setting low standards and expectations for their students, teachers reduce the risk of their own failure to meet standards. Raising the standards of student accomplishment in school thus entails not only higher expectations of students but also higher expectations of teachers themselves. It demands an attitude on the part of teachers that they will not easily accept student failure and a continuing commitment by teachers to do all they can to ensure successful student learning.

2. Effective schools have a clear sense of their educational mission and purpose.

A school should be a place where a student has the freedom to explore new subjects and ideas. Yet, giving wide freedom to students should not mean that the school abdicates the responsibility to guide and direct the student. In recent decades some schools have offered new electives of all kinds, as well as numerous other student options, and have in effect expected the student to determine much of his or her own educational needs and directions. Yet, it is the very responsibility of education to provide the student with the knowledge and understanding that underlie and are presupposed in the wise selection among educational possibilities.

Research on effective schools shows that disadvantaged students are best served when they have a clear understanding of what is expected of them. The effective school clearly defines its purposes for its students and sets its overall mission. Once the purpose and mission are set, then teachers and students are held accountable. The full resources of the school are marshalled and channeled to the accomplishment of educational goals that should be well understood by all members of the school community. Lacking such a direction and focus, the efforts of teachers and students are likely to be less productive.

3. Effective schools have principals who provide strong leadership.

Effective school researchers have found that the role of the principal is especially important in setting the tone and character of the school. If the principal is unsure of educational goals and mission, the teachers and students will be unsure as well. If the principal does not demand high standards and performance by teachers and students, others cannot be expected to do so. Indeed, the quality of leadership by the principal may be the one single factor most critical to successful education of disadvantaged students. The U. S. Department of Education reports that "many schools serving disadvantaged children project an image of neglect; talented teachers, good students and outside resources go elsewhere. At best, their principals keep a lid on disorder

and bad publicity; at worst, a chaotic atmosphere makes learning impossible." In order to alter these circumstances, "it takes aggressive leadership to turn such schools around. It takes time, hard work, good instincts, commitment, energy, and the ability to inspire others, even when no one else believes the job can be done."[5]

Effective schools have principals who believe in themselves, their teachers and their students. Such principals take a personal role in periodically evaluating classroom and campus environments. Their participatory leadership role, along with a positive attitude, can change the entire mood of minority and disadvantaged schools. The effective principal must reach out to the faculty and students, communicating a sense of personal involvement and concern. By demanding much of a school, the principal can find in staff and students abilities, talents and skills that they may not themselves have known that they possessed. The qualities of strong leadership are much the same in schools as they are in other walks of life and are not really a new discovery. Yet, if effective schools are to become widespread, a new attention to the selection of principals and a reenergizing of the leadership shown by current and future principals will be essential.

4. Effective schools have a safe and orderly school environment.

Learning does not occur in an environment where disruptive student behavior occurs frequently, where students do not show respect for the rules established by teachers and administrators, or where there are threats of physical violence and abuse. It is important to give students freedom to grow and develop. But with this freedom there must also be clear boundaries to behavior and conduct. In effective schools the difference between acceptable and unacceptable behavior in school is well defined and rules of student conduct consistently and firmly maintained. The right of a student to express his or her own individuality must not include the right to undermine the educational mission of the school or to deny the opportunity for other students to learn.

Firm enforcement of rules and regulations is only the beginning. It is equally important to create a school environment in which students themselves demand appropriate conduct on their own part and on the part of their fellow students. Students must recognize that the school is doing its best for the interests of the students themselves. A school in which students are enthusiastic about learning and education will find that the formal rules need only be invoked occasionally. A safe and orderly environment is in itself a good sign that the school is performing its broader educational mission successfully.

5. Effective schools emphasize the learning of basic skills and the development of a curriculum responsive to the student.

In order to function well in American society, it is first necessary to be able to speak, to read and to write the English language. Unfortunately, many disadvantaged stu-

dents today are leaving school without having learned even these very basic skills. Students must also know how to add, subtract, multiply, divide or perform other elementary mathematical tasks. They need to know the basic facts of American history, government and the economic system. Students who never acquire basic knowledge and skills of these kinds will be seriously impaired in their later job, community, political and other endeavors in life. At a minimum schools should ensure that students learn the basics of speaking, reading, writing, mathematics and social studies.

Some schools are too easily discouraged when students are slow to grasp language and other basic subjects. Schools serve students poorly, however, if they pass these students along from grade to grade, never insisting that they master the basics. Effective schools do not encourage their students who are behind in the basic skills to take elective courses that may divert their energies and attention from more fundamental knowledge and skills. If students do not learn basic subject matter on their first try, effective schools demand another attempt--indeed, as many times as necessary until mastery is achieved.

Skills in speaking, reading, writing and arithmetic are also more than just a means to a better job or some other practical goal. These skills also enhance the quality of life. For an adult who cannot read, the information and enjoyment of books, magazines and newspapers is inaccessible. Without writing, a vital means of communicating with other people is unavailable. Without effective speaking of the English language, even person-to-person communication may be difficult and frustrating on many occasions.

For Indian schools teaching basic skills in a vacuum is not enough. Educators will have to develop curriculum materials that capitalize on a sociocultural context familiar to the Indian student. Otherwise, the teaching of basic skills at the lower grades is less likely to be meaningful to the students.

6. Effective schools make students accountable and regularly monitor their progress.

Research into the practices of effective schools shows that they provide students with frequent feedback on their performance in school. They test students on a regular basis and otherwise take actions to assess the educational progress being made by the student. The school does not allow concern for the sensitivities and feelings of the student to inhibit communication of honest and candid assessments of student progress. For younger students school reports may go only to the parents, but for older students they should be received by both. In the long run, it is the student who suffers most, if educators fail to inform the student or parents of major educational gaps and deficiencies.

Learning is a process of trial and error. In order for the process to continue, the student must be informed when errors occur. The learning of good writing, for example, requires writing, criticism, rewriting, more criticism and continuing such practice

over many years. Teachers also need to receive regular evaluations of the amount of learning that is occurring in their classrooms. Such information gives teachers desirable feedback on the success of their own instructional methods and allows them to orient their teaching efforts more precisely to the current knowledge and needs of their students. If students are not learning, the teacher may also need to modify classroom techniques, or make a greater personal commitment to the task. Finally, teachers themselves must be accountable to school, principal and parents, which requires regular monitoring and evaluation of the level of learning of each student in each classroom.

7. Effective schools involve parents and the local community closely in the educational process.

Effective schools have the strong support of parents and the surrounding community. Schools need the support of parents in holding students accountable for progress in learning. They also need the support of parents in upholding standards of student behavior that ensure a safe and orderly school environment. Schools generally require the support and firm backing of the parents and community in the exercise of strong leadership by the principal.

The school for its part must support the values and serve the needs of family and community. Along with parents and relatives, the school is a primary source for the teaching of values to the youth in the community. If schools are to be successful, the values taught by the school must support the values of the family and community. Heavy involvement of parents and community in running the school helps to ensure that critical parental support and backing will be forthcoming. Parents can serve as board members, advisors, in-school volunteers and in many other capacities.

Conclusion

The effective school movement has laid out an overall approach to the education of minority and disadvantaged children who have traditionally done poorly in school. If successfully adapted to the unique needs of Indian schools, the seven basic characteristics described above are likely to be as important to the strengthening of BIA education as the characteristics have proven to be important in improving other areas of American education. The building of effective schools begins with a well defined school philosophy, doable goals and measurable objectives. It also depends on more mundane matters such as teacher selection, curriculum, design of special programs, instructional support/oversight and others. The remaining chapters of Part III address such matters. They examine existing practices in particular areas and raise a number of options for changes in BIA education. The goal is to take the practical steps needed to make BIA education serve effectively the needs of its Indian students and the Indian community.

FOOTNOTES TO CHAPTER X

1. National Commission on Excellence in Education, *A Nation at Risk: The Imperative for Educational Reform* (Washington, D.C., 1983).

2. U.S. Department of Education, *Schools that Work: Educating Disadvantaged Children* (Washington, D.C., 1987), p. 11.

3. Northwest Regional Education Laboratory, *Effective Practices in Indian Education* (Portland, Oregon: Research and Development Program for Indian Education, 1985).

4. U.S. Department of Education, *Schools That Work*, p. 25.

5. Ibid., p. 16.

CHAPTER XI

BIA Teachers

As classroom instructors, teachers stand in the front lines of education. They are responsible for maintaining a well-run classroom environment in which students are encouraged to learn. Teachers are also role models who communicate to students standards of behavior and sets of community values. Teachers must have a depth of knowledge of the subject matter and an understanding and ability to communicate this knowledge to the student. Effective schools depend above all on effective teachers.

As shown in Table 1, in 1987 the total number of full-time personnel classified by BIA as teachers in BIA schools was 947. This represented 17 percent of all BIA education full-time personnel. More than half of all full-time teachers (507 teachers) were located in schools within the Navajo Area of BIA administration, most of these schools located on the Navajo Reservation itself.

TABLE 1

NUMBERS OF TEACHERS IN BIA-OPERATED SCHOOLS IN 1987

AREA	Full-time Teachers[1]	Part-time Teachers[1]	Total Teachers	Percent Indian
Aberdeen	165	15	180	42%
Albuquerque	100	18	118	53
Anadarko	16	0	16	94
Billings	0	0	0	N/A
Eastern	29	7	36	31
Minneapolis	0	0	0	N/A
Muskogee	0	0	0	N/A
Navajo	507	21	528	39
Phoenix	105	18	123	35
Portland	11	13	24	33
Sacramento	0	0	0	N/A
Central Schools	14	0	14	57
Total	947	92	1,039	41

[1]Number of BIA personnel who have the job classification of teachers. Does not include other personnel under other BIA classifications who may also perform teaching duties.

However, BIA personnel classifications do not include all personnel involved in teaching under the classification of teacher. Most significant, there are more than 1,000 "education specialists" in BIA education, some of whom include teaching duties in their jobs. Precise numbers of personnel with teaching responsibilities can only be determined by examining staffing patterns at the individual schools themselves.

However, even allowing for possible misclassifications, teachers appear to be significantly underrepresented in BIA personnel. In public schools teachers alone represent 53 percent of all school system personnel. BIA teachers and education specialists combined represent only 36 percent of all BIA instructional (nondormitory) personnel.

The low percentage of professional teaching personnel in relation to total personnel is partly made up by the large number of education aides in BIA-operated schools. In 1987, there were 1,469 education aides in BIA-operated schools, more than the number of classified teachers and a ratio of one education aide for every 19 pupils. By comparison, the total number of classroom aides in public schools amounted to only one aide for every 129 pupils. In addition to education aides, BIA schools also contain numerous home living specialists, recreation aides and other supporting personnel--especially in boarding schools to serve dormitory needs.

BIA education faces a special set of problems in attracting and retaining good teachers. Many BIA schools are geographically isolated. Teachers often find that poorly maintained government housing at the school is the only housing available. Non-Indian teachers generally find it difficult to gain acceptance within and to socialize with the local Indian community. Restaurants, movies and other facilities may require long travel times and be impractical to visit on a daily basis. Some teachers in BIA schools deal with the problem of isolation by living off the reservation and commuting very long distances to the school. Some of them drive distances of 70 miles or more one way each day.

It has thus been difficult to recruit to Indian schools those teachers who have families and who otherwise expect the normal amenities and comforts of middle class American life. Non-Indian teachers located at isolated BIA schools have tended to be a blend of idealists, reformers, adventurers and the curious. Unfortunately, non-Indian teachers have also included a few of the misfits and failures elsewhere in American education. Some of these teachers ended up in BIA schools because no other school would have them. In other cases, teachers have been fleeing from personal problems and have been seeking to fashion a new life with a dramatic change in circumstance. BIA education has thus included some of the best and a few of the worst that the American teaching profession has had to offer.

The difficult socioenvironmental circumstances of Indian education, combined with low salaries, have resulted in an extremely high rate of teacher turnover. Non-Indian teachers frequently do not regard employment in a BIA school as a long term commitment. Many teachers enter BIA education for reasons of idealism or adventure,

but find that they are not able to adapt to life in rural, isolated settings typical of BIA schools. Rates of teacher turnover of 20 percent to 40 percent per year are reported in many individual BIA schools.

Statistics on the overall BIA turnover rate for all teachers could not be obtained for this report. However, BIA teachers are included along with most other professional personnel in the "1710" series of personnel classifications. From October 1986 to September 1987, a total of 512 professional personnel in these classifications left BIA education from a total of 2,328 such professional employees--yielding a professional turnover rate of 22 percent for 1986-87. Moreover, in 1985-86, the total number of personnel in these classifications leaving BIA education was almost 700 professionals. Thus, in merely two years around 50 percent of BIA personnel in the 1710 series (covering most BIA education professionals) either had to be replaced or the positions vacated went unfilled. By comparison, the Department of Education estimates that teacher turnover nationwide in all schools is in the range of 6 percent to 8 percent annually.

To be sure, the isolation and difficult living conditions that cause high turnover are not found at all BIA schools. Some BIA schools are located where non-Indian teachers can easily live and participate in a non-Indian community and a diverse social environment. For example, the Salt River Day School is located within the Phoenix metropolitan area. The ability to recruit teachers for these schools depends more on standard teacher concerns such as salary, fringe benefits, quality of facilities, school leadership and so forth.

BIA schools in recent years have placed a growing emphasis on recruitment of Indian teachers. These teachers may have been brought up in the local reservation community and may find teaching a way to remain on the reservation--providing for some BIA Indian teachers the only employment available in a reservation environment of widespread joblessness. Indian teachers may offer stronger and more powerful role models for Indian students. Indian teachers may have a better understanding of Indian culture and behavior, and be able to deal more successfully with the special problems of Indian students. They may also have a better understanding of the special difficulties Indians often face--such as learning English as a new language--and be more sensitive to differences in Indian manners and styles of learning.

Nevertheless, there are major difficulties in obtaining sufficient numbers of well-trained Indian teachers. According to the 1980 census, only 7.9 percent of Indians 25 and older had completed four years of college, compared with 16 percent of the U.S. population as a whole. Rates of attendance and completion of college are also much lower for younger Indians who have more recently entered the years of normal college study. Thus, there has been a limited supply of Indian teachers. Despite their best efforts, many schools still have a substantial majority of non-Indian teachers. The actual percentage of Indian teachers varies greatly from school to school, a few schools having no Indian teachers and some schools having almost all Indian teachers.

Overall, as shown in Table 1, 41 percent of the teachers in BIA schools at present are Indians.

The pressures to hire Indian teachers, combined with the limited number available, have resulted in some cases in the hiring of poorly-trained Indian teachers. As colleges and universities sought to expand Indian enrollments in the 1960s and 1970s, some of these institutions were willing to sacrifice full academic rigor. BIA schools found some of their newly hired Indian teachers deficient in the basic reading, writing and mathematical skills they were expected to teach. As requirements for state certification of teachers were imposed in the 1980s, the BIA found that some of its teachers were unable to pass the state certification tests.

Under current policy, all BIA teachers must be either state certified or have reasonable grounds to expect such certification in the near future. This requirement has constrained somewhat the ability of BIA schools to increase rapidly the proportion of Indian teachers among their faculties. A much increased reliance on Indian teachers in the future will depend above all on achieving higher numbers of well-trained Indian graduates of postsecondary schools of education.

The BIA schools need to address a number of concerns with respect to their teachers -- Indian and non-Indian. They need to attract teachers with strong knowledge of their subject matter and with the ability to communicate it to Indian students. The BIA schools need to attract more Indian teachers. They need to provide better in-service training for the teachers they currently have. A sharp reduction in the turnover rate is essential to improving the quality of teaching in BIA schools. Teacher morale and commitment to the task of Indian education need further support and buttressing.

In order to achieve these goals, there are several key areas in which BIA might take action: teacher salaries, recruitment, in-service training, evaluation and promotion. The following discussions briefly examine each of these areas and raise options for further consideration.

Teacher Salaries

As recently as the 1970s, BIA-operated schools paid salaries that equalled or exceeded the salaries paid to teachers in public schools. However, in the 1980s Federal pay levels have risen slowly. At the same time public school salaries--spurred by a national campaign to improve education--have risen much more rapidly. Between 1980 and 1986, average teacher salaries in public schools rose by 58 percent, compared with a rise in salaries for BIA teachers from 1980 to 1987 of 20.5 percent. Most recently in 1986, average teacher salaries in public schools increased by 7.3 percent, while BIA teacher salaries rose only 2.4 percent.

By 1987, many BIA-operated schools were reporting that their salary schedules were several thousand dollars below nearby public schools. BIA salaries fell behind public

TABLE 2

1987 BUREAU AND PUBLIC SCHOOL AVE. TEACHER SALARY, BY STATE AND NATIONWIDE

STATE	SCHOOL SYSTEM	AVERAGE TEACHER SALARY[1]
Arizona	BIA-Operated	$19,867
	Public	$26,280
New Mexico	BIA-Operated	$19,957
	Public	$23,977
North Dakota	BIA-Operated	$19,659
	Public	$21,848
South Dakota	BIA-Operated	$19,277
	Public	$18,781
North Carolina	BIA-Operated	$21,737
	Public	$23,775
U.S.	BIA-Operated	$19,861
	Public	$26,704

[1]Salary for contract year only. Total earnings may be higher if contract is extended into summer months.

Source: Public school data, National Education Association (informal communication).

school salaries at all levels of teacher experience, ranging from beginning teacher to the most experienced. The gap between BIA-operated and public schools was not uniform, however. Indeed, some states such as South Dakota faced depressed economies and also offered much lower teacher salaries in their public schools, compared with national averages. But most states, as shown in Table 2, paid considerably higher salaries to public school teachers.

In Arizona, for example, public school teachers earned on average $6,413 more than BIA teachers. Nationwide, the average 1987 salary of elementary and secondary teachers in U.S. public schools was $26,704, while the average teacher salary in the BIA-operated system was $19,861. The average public school teacher thus earned 34 percent more than the average BIA teacher. In fact, the average public school salary was not attainable by a BIA teacher at any level of experience. A BIA teacher at the highest salary increment earned $24,064, an amount $2,640 below the average salary earned by public school counterparts.

Table 3 shows beginning salaries for teachers in BIA-operated schools and in selected contract schools and public schools. The Cloquet public school in Minnesota, for in-

TABLE 3

SELECTED 1987 SALARIES OF BEGINNING TEACHERS FOR DIFFERENT SCHOOL SYSTEMS

School Name	Location	Type Of School System	B.A. Beginning Salary	M.A. Beginning Salary
BIA -Oper. Schools	Nationwide	BIA	$15,067	$17,028
Fond de Lac	Cloquet MN	BIA Contract	$13,500	$16,000
Cloquet P.S.	Cloquet MN	Public	$19,000	$21,000
Tiospa Zina	Agency SD	BIA Contract	$14,622	$15,666
Aberdeen P.S.	Aberdeen SD	Public	$16,000	$17,460
Ganado P.S.	Ganado AZ	Public	$18,000	$19,450
Chinle P.S.	Chinle AZ	Public	$20,000	$20,450
Gallup P.S.	Gallup NM	Public	$17,900	$18,835

Source: Informal communication with respective schools, Agencies and districts.

stance, pays beginning teachers with bachelor's degrees almost $7,000 more than the BIA contract school in the same town. The Chinle public school, located on the Navajo Reservation in Arizona, pays beginning teachers almost $5,000 more than the BIA pays its teachers in nearby schools.

Table 4 illustrates another major problem that adversely affects the ability of BIA-operated schools to recruit and retain teachers. Public schools in locations near BIA schools sometimes provide large housing subsidies for teachers. In Arizona, some public school teachers pay approximately one-third the rent that BIA counterparts must pay for the same size of housing unit. With few exceptions, rents for BIA hous-

TABLE 4

SELECTED 1987 SCHOOL SYSTEM HOUSING AND MEDICAL BENEFITS

School Name	Location	Sch.System	Housing Costs	Med./Dent
Chinle Board	Chinle, AZ	BIA	1 BR = $128 2 BR = $163 3 BR = $238	BIA pays part
Chinle P.S	Chinle, AZ	Public	1 BR = $70 2 BR = $75 3 BR = $80	Dist.pays
Wingate H.S	Wingate, NM	BIA	1 BR = $215 2 BR = $305 3 BR = $364	BIA pays part
Ganado P.S.	Ganado, AZ	Public	1 BR = $50 2 BR = $70 3 BR = $90	Dist.pays
Chuska/ Tohatchi	Tohatchi, N.M.	BIA	1 BR = $206 2 BR = $298 3 BR = $360	BIA pays part
Tohatchi	Tohatchi, N.M.	Public	1 BR = $170 2 BR = $216 3 BR = $246	Dist.pays

Source: Informal communication with selected schools and districts.

ing are based on comparable costs of privately owned rentals in nearby communities. Table 4 also shows that BIA employees must pay part of their medical/dental premiums, whereas premiums are paid fully by the public school districts in Arizona.

The low salaries of BIA teachers are highlighted by the fact that cooks and bus drivers in BIA-operated schools often receive higher salaries than teachers. For example, the beginning salary in 1987 for a bus driver at the Baca Community School in New Mexico was $17,538, compared with a beginning teacher salary of $15,850. At the San Juan Day School in New Mexico, the 1987 beginning salary for a cook was $20,322, compared with a beginning teacher salary of $15,473.

Low BIA teacher salaries make it difficult to recruit capable teachers, hurt teacher morale, and contribute significantly to the undesirably high rates of teacher turnover

in BIA-operated schools. Teacher salaries might be raised by adopting one of the following options:

Option 1: Pay a full year salary to BIA teachers, although they would continue to work 215 days per year (provides a 21 percent increase for beginning teachers).

Option 2: Provide a 25 percent (or some other percent) across-the-board supplement to the salaries currently paid BIA teachers.

Option 3: Provide for a restructuring of Federal grade levels of BIA teachers to achieve an approximate 25 percent salary increase on average (or perhaps even higher).

Option 4: Adopt a policy to pay BIA teachers the same salaries paid to comparable public school teachers in the same state and locality.

Option 5: Adopt a policy to pay BIA teachers the same salary, plus housing, medical and fringe benefits ("total compensation") paid to comparable public school teachers in the same state and locality.

Recruitment

Until the enactment in 1978 of P.L. 95-561 (or "561"), BIA teachers were recruited under the same rules and in the same manner as other members of the Federal civil service. However, enactment of "561" provided a much expanded role for elected Indian school boards. The school board today reviews all new teacher appointments and makes recommendations to the school principal. Once hired, the continuance of teachers in service is also subject to board review. The school board may recommend that the employee's contract be renewed or not renewed. If the school board's recommendation is for non-renewal, the school principal is not required to follow this recommendation, but where it is not followed, the principal must respond to the school board and explain his or her reasons.

After enactment of "561," existing teachers (and other employees) were allowed to continue under the old personnel system--becoming "status quo" teachers--or to become "contract" employees. The BIA-operated schools in 1987 contained 3,210 status quo employees and 3,235 contract employees (including both professional and non-professional types of jobs). New employees, however, must all be contract employees.

In recent years the BIA has established minimum requirements for teachers based on certification and licensing standards in the state where the position is located. A teacher, for example, wanting to work in an Arizona BIA-operated school must meet the certification requirements mandated by the State of Arizona. However, the school board has the power to waive certification requirements for teachers who are tribal members and who are giving instruction in an indigenous language and/or tribal

culture. Indian preference within the BIA requires the hiring of a qualified Indian applicant, whether for an initial appointment or an advancement, over a similarly qualified non-Indian applicant. P.L. 95-561, however, gives tribal governing bodies or local school boards, with written authorization from the governing body of the tribe, some flexibility in applying Indian preference. School boards or other governing bodies have the authority to waive Indian preference on a case-by-case basis for non-Indians who are already employed in the BIA system. In practice, when a waiver is issued to a non-Indian, it is usually granted to an applicant for a position of principal or Agency Superintendent for Education. Some tribal educators have suggested that perhaps the waiver provision should be extended to non-Indian applicants who are not currently employed by the BIA.

Recruitment of teachers is the responsibility of the local school or Agency Office. Hiring decisions are made by BIA school system administrators in consultation with local school boards. A recruitment plan that focuses on where and how to recruit is also developed collaboratively between the principal and school board. At the national level, the Office of Indian Education Programs (OIEP) has the responsibility for establishing a recruitment program to attract qualified Indians for education positions. OIEP is also responsible for maintaining a national roster of qualified applicants for all established positions at the local level. The national list of qualified applicants provides local BIA-operated schools with a centralized repository of qualified applicants to supplement their own applicant files. Finally, OIEP has the responsibility to develop a recruitment brochure describing BIA educational programs and opportunities to help facilitate recruiting for BIA-operated schools throughout the nation. Partly because of a staffing shortage, OIEP has not fulfilled its obligation in this key personnel area.

Locally, the approach used for recruiting teachers varies from school to school and from Agency to Agency. Generally, smaller schools rely on their Agency Office to develop and distribute vacancy announcements. Larger schools and a few smaller schools do their own recruiting with mixed results. Some Agency staff have collaborated with university education officials to provide student teaching opportunities in Bureau classrooms. This approach provides the regular teacher with some assistance and the school with a possible applicant for future teacher openings.

A major shortcoming in recruiting teachers is the lack of planning and organization. Major universities with education departments could be contacted much more frequently by BIA Agencies (or OIEP) to establish ongoing student-teacher programs with the purpose of giving potential teachers experience in BIA schools. Schools and agencies have seldom contacted education departments at universities in their area for recruiting fair dates--fairs where students soon to be graduates or recent graduates are looking currently for teaching positions.

The quality of BIA education will depend on the ability to attract capable, well trained and dedicated teachers. Some options that might improve recruitment include:

Option 1: Create a central recruiting office in OIEP that would work closely with principals and would visit university campuses, encourage their education program graduates to apply to BIA schools, and generally seek to channel suitable new applicants to BIA schools.

Option 2: Establish a program whereby recipients of Federal student loans will be forgiven $5,000 per year, or 25 percent of the loan per year (whichever is greater), for each year of teaching in a BIA school.

Option 3: Create and generously fund a direct loan program for Indian students interested in teaching as a career. Provide special training and summer job opportunities for students in this program. Forgive 25 percent of the loan for each year of teaching in a BIA school after graduation from college.

Option 4: Set up a program to provide funds directly to universities and colleges to establish or expand efforts to recruit and train Indian students to become BIA teachers. Make the successful graduation and placement of significant numbers of students in BIA schools a condition for continued receipt of such funding.

Option 5: Allow tribal councils and/or Indian school boards to waive requirements for Indian preference for non-Indian, non-BIA employees (they already have such waiver authority for non-Indians who are presently employees of the BIA).

Option 6: Establish a program of graduate school fellowships for research in Indian education. Seek to recruit qualified graduates of such a program into the management track for BIA education.

Option 7: Convert the Haskell Indian Junior College into a four-year institution specializing in the training of future Indian teachers for Indian schools.

Option 8: Establish procedures whereby requirements that new teachers must have certain educational course work can be waived, allowing recruitment of teachers who may have excellent knowledge of subject matter and good instructional skills, but lack necessary education credentials.

Option 9: Establish a senior service program to recruit retired military, civilian government, business, academic and other retired people with valuable knowledge and skills to teach in BIA schools.

In-Service Training and Teacher Networks

Once a teacher has been recruited, it is also critical to provide continuing opportunities for teachers to improve their knowledge of subject matter and their teaching skills. Admittedly, with current high rates of teacher turnover, the benefits of such in-service training are diminished. There is not as much benefit in training a teacher, if the teacher is likely to leave shortly thereafter. However, as BIA education seeks

to address the problem of teacher turnover, and to recruit high quality teachers, it will also be important to take steps to improve the in-service training and support for its existing teachers.

At present, BIA efforts in these areas are minimal. The BIA does not sponsor any annual meeting which would provide the opportunity for teachers to share innovative educational strategies with their counterparts. On a limited scale, a Math and Science Summer Institute at Haskell Indian Junior College offers selected mathematics and science teachers an opportunity to learn new instructional strategies. A small number of teachers in the BIA system are also selected by their principals to attend regional meetings on topics related to their specialty, for example, special education. By attending these meetings, these teachers are introduced to educational strategies and technological developments that might be applied in their own classroom teaching environments.

At the Agency or school level, there is some in-service training that is usually conducted at the beginning of the school year. Whole language and assertive discipline are two popular subjects for one-week or two-week sessions. This in-service training further affords the superintendent an opportunity to outline the Agency goals and objectives for the next school year.

Greater communication among teachers makes possible the exploration of mutual problems and the development of new solutions. If an instructional approach has worked for one teacher, such a success story should be communicated to other teachers who may want to try it out as well. Greater communication among teachers also helps to create a sense of broader involvement in the common task of BIA and Indian education. In this way, it can achieve not only greater exchange of instructional ideas and methods among teachers, but also boost teacher morale and esprit de corps within the BIA school system. At present, teachers in BIA-operated schools have little sense of identification with and communication with teachers in other BIA schools. They tend to see themselves as teachers at an individual school, rather than as part of a nationwide BIA-operated school system.

In order to improve in-service training and networks of communication among teachers, the following options are available:

Option 1: Add five teacher days during the school year during which students will be excused and teachers provided with in-service training.

Option 2: Expand the teacher work year and number of paid teacher days (beyond the current 215) to allow for greater in-service training--also thereby increasing teacher salaries.

Option 3: Each year offer 25 percent of teachers the opportunity to attend a summer long training institute and to be paid for that year on a 12-month basis.

Option 4: Provide greater resources to hire outside experts and consultants to visit BIA schools and provide teacher training.

Option 5: Provide Federal funding for one or more university centers to conduct research and to deliver in-service training to teachers in BIA schools.

Option 6: Establish a program whereby successful new methods and any other teacher success stories from one BIA school are rapidly communicated to teachers in other BIA schools.

Option 7: Establish annual conferences for selected teachers from BIA (and perhaps other Indian) schools.

Option 8: Develop a BIA teacher newsletter--and perhaps also some form of teacher research journal--to facilitate exchange of ideas and other communication among teachers in BIA schools.

Option 9: Develop a program to use satellite and other modern technology to bring new teaching methods and other subjects of interest to teachers in isolated and remote BIA schools.

Option 10: Develop a program whereby satellite and other modern technology is used as a vehicle to bring the best teachers in the United States electronically into the classrooms of BIA schools.

Evaluation and Promotion

Some teachers may be resistant to other people evaluating and judging their instructional efforts. Yet, just like students and administrators, teachers must also be held accountable to standards of acceptable performance. The continuance of teachers who are not effective in the classroom serves neither the interests of Indian students nor of fellow teachers. Indeed, nothing would be more damaging to BIA teacher morale than a school failure to insist that all teachers must show at least the minimum of skills and motivation to educate successfully their students.

Evaluation of teacher performance faces the problem that student learning and behavior are difficult to measure. Standardized test scores measure some elements of learning, but not all aspects. Moreover, test scores do not allow for the talents and background of the students and the difficulty of the task facing the teacher. With some students a modest increase in test scores may represent a major success for the teacher. Other students from well-off families and with other advantages may learn rapidly almost independent of what the teacher does. With such students the teacher may deserve little special credit for rising test scores.

Despite the limitations of objective measures, it is still important to use measures such as the rise in test scores, attendance rates, incidence of behavioral problems,

and other quantifiable items in the evaluation of teacher performance. Other ways of evaluating teacher performance include regular classroom observation by principals and senior teachers, and consultations with parents on the progress of their children. The most promising method to evaluate a teacher's performance is to measure student success in achieving learning goals associated with meeting criterian-referenced objectives incorporated into a faculty-developed school curriculum.

Along with evaluation of teacher performance should go rewards for success. Skillful teachers might be rewarded with opportunities to travel to conferences or to receive special training opportunities. Awards and honors can be publicly bestowed upon especially effective teachers. Increases in salary, cash awards and other monetary compensation are a particularly important reward that can be offered. Notably effective teachers should be able to expect as a matter of course that they will experience more rapid movement up the salary schedule.

The BIA has generally offered little in the way of special promotion opportunities to its teachers. One promotion opportunity available is to become a master teacher, which involves a higher salary as well as public recognition of excellence. To achieve this status, a teacher must receive an outstanding rating for three consecutive years. However, in 1987 there were only five master teachers among all the schools in the BIA system.

This small number does not mean that superior teachers do not exist in most schools. Some superior teachers transfer to higher paying jobs in the public schools even before completing their three consecutive years with outstanding performance ratings. Other excellent BIA teachers are not identified as such by principals because they do not believe the personnel budget can accommodate the added cost of a master teacher. Some principals also prefer to rate their teachers at the average or competent III level, so that the school will not be faced with extra increment increases in teacher salary bases. In some cases, principals are also reluctant to make judgments about relative teacher performance that may stir jealousies or may come under criticism.

Some options for achieving greater accountability of teachers and higher rewards for effective teacher performance include the following:

Option 1: At the beginning of each school year, set measurable standards (such as measured by reviewing criterian-referenced objectives, attendance records and test score results) for student improvement over the year for every classroom and teacher. These standards would take into account student background and the educational weaknesses of students. Reward teachers who fulfill or exceed the standards and seek better future performance of those teachers who do not.

Option 2: Create a program of highly visible awards and honors--Bureauwide, Agencywide and at each school--for outstanding BIA teachers.

Option 3: Provide for much more frequent awarding of cash bonuses and special salary increments for those BIA teachers who significantly exceed expected standards of teacher performance--perhaps with a quota that approximately 10 percent of BIA teachers per year should receive such salary increments.

Option 4: Provide for wider designation of BIA teachers as master teachers--perhaps setting a long run target that at least 5 percent of all BIA teachers should be master teachers.

Conclusion

Improving the quality of teaching in BIA schools depends on a number of steps. The teaching skills of existing teachers must be upgraded. Better teachers need to be recruited. Salaries, housing and other conditions of employment need to be improved substantially, if teacher turnover is to be reduced and the best teachers retained. Those teachers who are unable to meet minimum acceptable standards should not be permitted to continue in the classroom. All this will take a good deal of effort, and some additional money for teachers as well. But improvement of teaching lies at the heart of establishing an effective system for educating Indian students.

CHAPTER XII

BIA Curriculum

Indian children have many of the same curriculum needs as other American children. Indian children must be prepared to function in American society, requiring at a minimum fluency in reading and writing of the English language. Indian children need to learn mathematics and the practical use of computers. They must understand the basic workings of American political and economic institutions. Many Indian children will need to learn physics, chemistry, computer science and other scientific subjects demanded in an age of pervasive application of technology. Understanding this, the curriculum needed in BIA schools is little different from the curriculum of other schools in mainstream America, for graduating students from both systems must be prepared to function effectively in a modern world.

Indian children have other educational needs, however, that are unique to them. Perhaps more than any other population group, Indians are encouraged to maintain their traditional culture. America demands that immigrants from other nations must take active steps to assimilate into the broader society. But American Indians, as indigenous Americans, are at least partially exempt from this requirement. The Chief Justice of the U.S. Supreme Court, John Marshall, long ago grappled with and sought to define Indian status when he referred to the Indian tribes as "domestic dependent nations." Legally, an Indian reservation today has a special Constitutional status that allows it to define and preserve its own culture and its tribal government is exempt, for example, from the normal constitutional separations of government and religion.

Some tribes may prefer that Indian language, tribal government, traditional culture and other Indian institutions be taught outside the schools. They may regard the BIA school exclusively as a means of preparing Indian children to function in the non-Indian world. Other tribes, however, may regard the BIA school as serving a pluralistic role, teaching the culture of both Indian and nonIndian communities. The BIA schools thus may be asked to incorporate pluralistic elements in their curriculum to educate Indian students to become functionally and culturally literate in Indian as well as mainstream American society.

Cultural Literacy

If we examine the state of elementary and secondary formal education in America, as recent educational studies urging comprehensive reform have done, we will like-

ly observe serious educational problems. The research points to an underlying problem in classrooms. It is the cornerstone of any school's program--the curriculum. This "rediscovered" finding has been known to be a major failing of Indian education programs for some time. Various studies, including the 1928 Meriam Report, *Indian Education: A National Tragedy--A National Challenge* (a 1969 Senate subcommittee report on Indian Education), *To Live on This Earth* (a comprehensive 1972 study on Indian education) and a national BIA Indian education needs assessment conducted in 1976, have all noted that the curriculum found in Indian schools does not typically meet the needs of Indian students.[1] As a consequence, primarily because of the lack of meaningful instructional content in the curriculum, it is the exception when a student is inspired or is enthusiastically involved in classroom learning activities. While knowing about the inadequacies of curriculum development for some time, BIA educators (as is true with their public school counterparts) have done little to establish a curriculum that successfully makes a connection with the Indian student and the sociocultural experience the student brings to the classroom.

The findings of the studies just alluded to and those from this report point out that Indian student deficiencies in reading and language pervade virtually all classrooms, whether it is in public, private, BIA or tribal schools. For Indian students, these problems have been underscored by their receiving extremely low test results in the reading and language arts areas of standardized achievement tests. These results are no surprise to the education evaluator or researcher familiar with classroom learning environments in Indian schools.[2] In a ninth-grade science class, to cite a typical secondary example, instructors frequently have to read from the textbook in order for the majority of students to comprehend a new concept or theory. Teachers have realized long ago that most students lack the reading skills and, additionally, the requisite base of information from which to understand, independent of teacher assistance, new abstract materials. These reading and language deficiencies cannot be overlooked and have adverse implications not only for the student's self-esteem, but also for tribal goals of self-determination and the potential socioeconomic contribution of the Indian student to the nation as well.

A common-sense approach to improve school curricula has been suggested by E.D. Hirsch, a Professor of English at the University of Virginia and the author of *Cultural Literacy* (1987). His solution is to develop a curriculum that incorporates cultural context to provide the student with the "basic information needed to thrive in the modern world." Such a curriculum helps the student establish a global, cultural information base which has been called "world knowledge" or what Hirsch prefers to call "cultural literacy," which he defines as "the network of information that all competent readers possess."[3]

The call for incorporating cultural literacy into school curricula, Hirsch argues, is particularly crucial for at risk, disadvantaged children since "cultural literacy constitutes the only sure avenue of opportunity for disadvantaged children, the only reliable way of combating the social determinism that now condemns them to remain in the same social and educational condition as their parents."[4] For Hirsch, students from such a

socioeconomic background cannot be personally blamed, nor their teachers, for the underlying problem of the students' failure to master reading and the mainstream language. The root cause is the curriculum found in most schools. Hirsch asserts that school curricula too often reflect erroneous assumptions that elementary and preschool education need not emphasize specific (local or national cultural) content nor "teach young children adult (cultural specific) information before they fully understand it."[5]

Hirsch's argument places emphasis on the cultural transmission role of education. In this view communities are founded and maintained by sharing or transmitting culturally specific information from an informed community member (adult) to an initiate (child). In such a naturally occurring teaching-learning process, the adult communicates culturally appropriate information to a child so that, in time, that child can learn to participate fully in the society of which he or she is a part. Hirsch considers this cultural literacy approach, which has existed informally for centuries in cultures throughout the world, to be adaptable to the school by means of the school's curriculum. Establishing a culture- or content-specific curriculum in the school, Hirsch contends, will help to improve the quality of the learning taking place in the classroom of minority young children, so that in the long run the children will become effective participants in not only their own culture or community, but also in the national and international community.

Curriculum in Bureau of Indian Affairs schools can be generally described as being content-neutral--where skills (reading, mathematics, etc.) are taught by a few examples devoid of cultural or community context. (About 5 percent of the Bureau and contract schools are making efforts to incorporate cultural context into their respective curricula.) The cultural literacy model, on the other hand, is designed to assist students in expanding their informational base and cultural appreciation so that they can "learn to participate in complex cooperative activities with other members of their (local, national and international) community."[6]

Determining the Relevant Culture

Developing curriculum materials to accurately portray Indian culture in a Western-dominated world is complicated by the fact that Indian culture itself is not fixed nor well defined, as it is undergoing constant change and varies from tribe to tribe. In the past, the arrival of Western science and technology, along with other products of Western civilization, were a shock to the cultural beliefs and practices of American Indians. Even today, Indians from over 500 tribes are seeking to assess the ultimate consequences. There are wide differences of opinion among Indians on how to balance the conflicting claims of traditional and modern cultures. The final character of the Indian response is not yet settled.

The BIA schools originated as an instrument of outright assimilation. There was little or no questioning of the desirability of such complete assimilation. When this policy changed in the 1930s, the BIA schools grafted some course materials concern-

ing Indian culture into their curricula. But these materials had more the character of a token concession than of a strong commitment to teach tribal culture and institutions. The BIA has found the incorporation of cultural materials into its curriculum to be a slow and difficult process.

Indeed, the BIA schools still suffer from uncertainty about their true purpose and mission. Is it primarily to educate Indian children to give them the skills to assimilate into mainstream society, assuming that they might want to exercise this option? Or is the BIA mission to educate Indian children to be able to function in two separate cultures? Or, conceivably, should Indian children be educated for a single culture that is itself uniquely Indian, and somehow blends together elements of traditional Indian beliefs with the influences of Western science and civilization?

The BIA schools have, in practice, not served any of these roles very effectively. As examined in Chapter IV, Indian children have fallen well behind other children in the learning of reading, writing, and mathematics. Nor have BIA schools served effectively to instruct Indian children in their own Indian language, history, culture and institutions. It may also be that for many Indian children success in the latter would also promote success in the former. When these Indian children develop a deeper and stronger sense of cultural identity, their self-esteem and motivation to learn may also rise, causing them also to do better in the learning of basic skills needed in the broader society.

Indian history and culture are important, but economic development and well being are also important. Few question today that Indian reservations and people need a stronger economic base of support. Indian children leaving school should at a minimum have a basis for finding a job and improving their economic welfare over their lifetime. Indian reservations need tribal members with knowledge and skills to build up the reservation economy. These economic needs have become matters of special concern in the design of the future, economic-responsive curriculum for BIA schools.

Current economic trends suggest that the future world economy will be rapidly changing and that the ability to adapt rapidly will be at a premium. Moreover, new jobs increasingly will be in fields that demand a high level of knowledge and technical skill. In *Workforce 2000*, a recent study sponsored by the U.S. Department of Labor, the authors write that "among the fastest-growing jobs, the trend toward higher educational requirements is striking. Of all the new jobs that will be created over the 1984-2000 period, more than half will require some education beyond high school, and almost a third will be filled by college graduates. Today, only 22 percent of all occupations require a college degree."[7] Fully 52 percent of all new jobs will require some college training, compared with 42 percent of existing jobs. In short, if Indian students are to be able to keep up in this future world economic environment, they will need to acquire in school a solid foundation of basic knowledge and skills.

The Department of Labor also ranked jobs and the levels of skills they require, ranging from 1 at the lowest level of skill to 6 at the highest. The fast growing jobs all have

higher language, reading and math skill requirements than current jobs. It is in the slow growing and declining areas of the economy that lesser skills in these areas are needed. As a matter of economic necessity, the curriculum of BIA schools should therefore be tailored to emphasize strongly the development by Indian children of these basic language, reading and math skills.

This conclusion is reinforced by projected changes in the future occupational structure. The average growth in jobs from 1984 to 2000 is projected to be 25 percent. The fastest growing occupations are projected to include lawyers and judges (71 percent); natural, computer and mathematical scientists (68 percent); technicians (44 percent); engineers, architects and surveyors (41 percent); and social scientists (40 percent). The slowest growing occupations are projected to be in blue-collar areas such as miners (-16 percent); agriculture, forestry, and fisheries (-12 percent); and machine setters, operators and tenders (-8 percent).

Another important study of the future economy and the educational needs of future workers is entitled *High Schools and the Changing Workplace: The Employer's View,* prepared by the National Academy of Sciences. This study focused on the jobs that would exist in the next 10-15 years and what skills would be needed by students to function in that job environment. The workplace viewed by the Panel will be one heavily impacted by changes in technology. These changes will greatly alter the nature of employment, requiring much greater worker flexibility and the ability to acquire whole new job skills several times over a lifetime. One of the Panel's major findings was that: "The major asset required by employers of high school graduates seeking upwardly mobile careers is the ability to learn and to adapt to changes in the workplace. The continual evolution of work functions will require that workers master new knowledge and new skills throughout their working lives. The ability to learn will be the essential hallmark of the successful employee."[8]

The National Academy of Sciences (NAS) study further described the educational competencies that all students should master to be successful throughout their working lifetimes. It recommended that: "The core competencies...can provide the basic understanding and skills needed both to perform entry-level jobs and continue the learning process. Technical education, vocational training, and curricula providing specific job skills can enhance a student's employability, but cannot substitute for education within core competencies."[9] The NAS study stated that the one most critical skill--essential for both success and mobility in American society--is command of the English language. It emphasized that "all American young people, regardless of their home or native tongue, need a functional command of standard English in its written and spoken forms."[10]

Another core competency described by the NAS study is reading. As the workplace becomes more and more technology oriented, the need to read with comprehension and to interpret written materials will increase. Such materials in the form of manuals, catalogs, reference books, texts and instructions must be understandable to the employee. Letters, vouchers, invoices and requisitions are necessary for com-

munication in all forms of business and personal matters. Reading skill is essential not only for success in the workplace, but also for competent functioning in society. The NAS study stated that strong reading skills involve a person being able to:

- Understand the purpose of written material.
- Note details and facts.
- Identify and summarize principal and subsidiary ideas.
- Be aware of inconsistency in written material.
- Verify information and evaluate the worth and objectivity of sources.
- Interpret quantitative information; for example, in tables, charts, and graphs.[11]

Writing skill is similarly seen by the NAS study as important for transmitting ideas and information. While there has been some shift to verbal communication, particularly where time is critical, the permanence of written material is often required. The ability to think and organize material goes hand in hand with the ability to present ideas clearly and concisely. Effective writing involves the ability to:

- Gather information suitable for the purpose.
- Organize information in a logical and coherent manner.
- Use standard English syntax.
- Apply the rules of correct spelling, punctuation, and capitalization.
- Attribute reference correctly.
- Use reference books such as a dictionary, a thesaurus, and an encyclopedia.
- Write legibly.[12]

The NAS study recommended that all students be able to understand and apply basic mathematics through elementary algebra. It also recommended an understanding of geometry and trigonometry. As society becomes more quantitative in its operation, the need for both basic and more advanced levels of computations skills will increase. This will mean that future workers should be able to:

- Add, subtract, multiply, and divide whole numbers, decimals, and fractions accurately.
- Calculate distance, weight, area, volume, and time.
- Convert from one measurement system to another, for example, from English to metric.
- Determine the costs, time, or resources necessary for a task.
- Calculate simple interest.
- Compute costs and make change.

- Understand simple probability and statistics.
- Calculate using information obtained from charts, graphs, and tables.
- Use ratios, proportions, percentages, and algebraic equations with a single unknown.
- Estimate results and judge their accuracy.[13]

While not one of the "3-R's," the ability to reason and solve problems is another core competency that will be demanded by employers increasingly in the future. The capacity to take knowledge and experience and apply them to understand systems and the choices among various options is a powerful asset in any work realm. It is also, of course, a great benefit in personal affairs as well. According to the NAS study, worker reasoning should include the ability to:

- Identify problems.
- Consider and evaluate possible alternative solutions, weighing their risks and benefits.
- Formulate and reach decisions logically.
- Separate fact from opinion.
- Adjust to unanticipated situations by applying established rules and facts.
- Work out new ways of handling recurring problems.
- Determine what is needed to accomplish work assignments.[14]

Finally, within systems where speed is essential, skills in oral communications are desirable. As with written communications, a person must be able to organize and present information to others clearly and concisely. In a society where many people can be reached through new communication technologies, the importance of oral communication has grown. Strengths in oral communications will require that a person be able to:

- Communicate in standard English.
- Understand the intent and details of oral communication.
- Understand and give instructions.
- Identify and summarize correctly principal and subsidiary ideas in discussions.
- Obtain, clarify, and verify information through questioning.
- Participate effectively in discussions. [15]

Emphasizing the Basics in BIA Schools

As examined in Chapter IV, Indian students graduating from BIA high schools fall well short of the mastery of reading, writing and mathematics of most other American children at that same educational level. For a number of cultural and socioeconomic reasons, BIA students begin school somewhat behind their non-Indian peers, but on average steadily fall further behind as the students advance to higher grades. There is no more urgent task facing BIA education than to reverse this failure to teach the basic knowledge and skills that Indian students will need for future success in life.

The ability of Indian schools to teach the basics will significantly influence the prospects for economic development of Indian reservations. It also goes without saying that the ability to read, write, do mathematics and other basic skills is a prerequisite for full participation in modern life. Indian children who grow up lacking these skills will be denied a source of great personal satisfaction and self-esteem, as well as a necessary tool in earning an adequate income.

Teaching the basic skills and other subject areas to Indian children may require special instructional methods tailored to the special circumstances of Indian reservations and Indian life. For example, it is estimated that approximately 30 percent of Indian children enter BIA schools speaking predominantly their native tribal language and English as a second language, if at all. These native speaking children may require a special phase-in and adjustment period to achieve a comfortable acceptance of English as a language of primary school use.

It may be necessary to place special emphasis on Indian language skills in early school years, in order to provide the necessary foundation for later learning. The "whole language" program currently being used successfully at a number of schools on the Navajo Reservation reflects this philosophy. Children are immersed in language studies from the very beginning of their school years and are given continuous and extensive drilling and practice in reading and writing. By emphasizing Navajo life and culture in these efforts, the learning of reading and writing can be made more immediately relevant to the experiences of the children.

The use of computer learning may be well suited to the teaching of mathematics to Indian children. The computer can pose problems, check answers and identify errors in an automatic, impersonal and unthreatening way. It does not involve the child in a competitive classroom interaction with peers, or the possibility of feeling rebuked by the teacher for errors. It is sometimes said that Indian children tend to withdraw from outright classroom competition, and dislike public exhibitions of their levels of learning. If and where this is true, these factors may make the computer a particularly valuable instructional tool for Indian children.

Other special instructional methods may also be particularly appropriate for BIA schools. There may in fact be considerable diversity among BIA schools in terms of

the best approach available for each school. The BIA has made little systematic effort to study its curriculum and the best ways of organizing and teaching this curriculum. In some schools there is poor coordination among teachers in different classes, so that a student may find that the subject matter for one year does not pick up from and effectively build on the subject matter of the previous year. Moreover, the instructional approach experienced in the classroom one year may be altogether different from the approach experienced in the next year.

Each school ideally should lay out what learning it expects each student to accomplish during his or her full time in the school. Given this final goal, then the curriculum for each year should be designed in a coordinated fashion to ensure reasonable progress each year towards this final goal. The expectations for student acquisition of basic knowledge and skills should be specified in considerable detail for each year along the road to final completion of that school program. Each teacher should have a clear understanding of these learning goals, should coordinate his or her classroom teaching with the broader learning plan, and should be held accountable at the end of the year for actual student performance in demonstrating progress toward the accomplishment of school goals.

In order to place a greater emphasis on students becoming effective participants in the Indian and mainstream world, the following curriculum options can be considered:

Option 1: Create a field-based curriculum planning and research staff within OIEP that, among its other duties, would be responsible for working with BIA-operated schools and teachers in the development and evaluation of their curricula and instructional approaches.

Option 2: Develop a program to communicate curriculum and instructional success stories found in BIA schools, in other Indian education, or elsewhere in American education throughout the BIA school system.

Option 3: Formulate a policy statement for BIA-operated education emphasizing the urgency and highest priority that students should develop proficiencies in reading, writing, mathematics and other basic knowledge and skills.

Option 4: Develop detailed standards of student knowledge that should be met by all students in BIA-operated schools by specified grade levels.

Option 5: Devise new tests of student knowledge, or use existing tests, and require that all students must pass these tests before moving beyond specified grade levels, or before graduating from a BIA-operated school.

Option 6: Create a program to introduce computer learning on a widespread basis into the instructional programs of BIA-operated schools.

Option 7: Require each school principal to prepare a curriculum plan showing how courses are sequenced from year to year and assuring the coordination among subject matter and teaching approach in this sequence.

Option 8: Develop curriculum competency criteria for each required subject by grade level. Although the development of the Minimum Academic and Dormitory Standards has provided curriculum guidelines, the guidelines are largely subject titles. Those titles do not provide the Agency curriculum specialist, for the few Agencies that have them, with sufficient substantive guidance to develop a curriculum that is comparable to other curricula established and implemented by other agencies for their respective schools.

Option 9: Require that each Agency Superintendent for Education have a curriculum specialist for the Agency staff or, if not fiscally possible, hire a highly qualified curriculum expert to provide curriculum technical assistance to agencies on an as needed basis.

Option 10: Fund university or other outside specialists in the development of new curriculum concepts and instructional materials specifically for BIA schools.

A Curriculum in Support of Economic Development

As discussed, the most important curriculum measure in support of Indian economic development is to ensure that Indian children master the basics. Beyond that, however, there are a number of other ways in which BIA education can contribute to the prospects for economic growth on Indian reservations. Highly specialized vocational training tends to offer an uncertain possibility of a future job payoff, because the likelihood that a given specialized job will be attracted to an Indian reservation is usually small. However, a broader type of vocational training in basic mechanical work skills--such as the use of tools and machinery, following designs and blueprints, and assembling and combining diverse materials--can be a valuable aid to future employment prospects.

BIA schools can also serve the purpose of instilling habits of behavior and personal conduct that will be attractive to future employers. Schools should emphasize and insist that students be on time, respect the rights of other students, not exhibit rude or discourteous behavior, and otherwise follow the standards of proper conduct that will be expected of them in the workplace. The recent study of employer viewpoints, done by the National Academy of Sciences, found that job prospects were enhanced by abilities to:

- Interact in a socially appropriate manner.
- Demonstrate respect for the opinions, customs, and individual differences of others.
- Appreciate the importance and value of humor.

- Offer and accept criticism constructively.
- Handle conflict maturely.
- Participate in reaching group decisions. [16]

Success in the workplace and society depends further on good work habits and attitudes. Although positive habits may be important to the future of Indian students, they are sometimes neglected in school. As Indian children grow up, positive role models and opportunities may be missing in home life and may have to be provided in other ways. BIA schools thus for some children may have to play an important role in instilling habits and attitudes such as the following:

- A realistic positive attitude toward one's self.
- A positive attitude toward work and pride in accomplishment.
- A willingness to learn.
- Self-discipline, including regular and punctual attendance and dependability.
- The ability to set goals and allocate time to achieve them.
- The capacity to accept responsibility.
- The ability to work with or without supervision.
- Appropriate dress and grooming.
- An understanding for the need for organization, supervision, rules, policies, and procedures.
- Freedom from substance abuse.
- Appropriate personal hygiene.[17]

In order to participate effectively in the mainstream American economic system, a sound knowledge of its traditions, practices, history, laws, theories and other institutional elements will be a major asset. The signing of a legal contract, for example, presumes a common understanding of what it means to sign a contract and what judicial or arbitration procedures may be available in case of disagreements. The sophistication to approach non-Indian sources of financing, to present a cash-flow analysis of an investment prospect, to assess marketing feasibility of a product, and other such knowledge are needed in the formation of new reservation business and other enterprises. The NAS study found that economic as well as broader social considerations should motivate schools to try to teach their students at least the following:

- The history of present-day American society.
- The political, economic, and social systems of the United States and other countries.

- The fundamentals of economics, including a basic understanding of the roles of money, capital investment, product pricing, cost, profit, and productivity, and market forces such as supply and demand.
- The concept of "trade-offs" and the differences between economic principles, facts, and value judgments.
- The roles of industry and labor in creating wealth, maintaining employment, and raising the standard of living.
- The forms and functions of local, state, and federal governments.
- The rights and responsibilities of citizens.
- Civil rights and justice in a free society.[18]

Schools can also play a role in teaching students that both economic competition in a marketplace and personal entrepreneurship can be legitimate and socially worthwhile activities. Some tribal cultures may discourage the formation of new businesses, because they sometimes treat individual efforts to achieve business success as an offensive assertion of individual superiority over fellow members of the Indian community. In some tribes it may also be difficult to promote an Indian worker to be a foreman or to become a part of management, because an organizational hierarchy is seen as offensive to the Indian spirit of a community of equals. These attitudes may in many ways be commendable; yet, they may also deny Indians the opportunity to participate fully in modern economic life.

Courses in the social attitudes favorable to entrepreneurship and in the social benefits of market efficiency might be introduced into the curriculum of BIA schools. Indian students might experiment with simulated games and role-playing that give them experience in the standards of behavior and the entrepreneurial outlook characteristic of a modern market economy.

In order to promote the prospects for Indian economic development, the following options can be considered.

Option 1: Set and enforce standards of student conduct and behavior in BIA-operated schools that will teach and reinforce the standards that students will later encounter when they enter the world of business, government and other employment.

Option 2: Develop and introduce into BIA-operated schools courses in basic economic history, the legal framework of markets, the concepts of supply and demand, how to assess likely revenues and costs, and other basic economic subjects.

Option 3: Develop and introduce into BIA-operated schools courses in the values and behavior patterns of business, including the outlook and characteristic traits of successful entrepreneurs in the market.

Option 4: Create a program whereby successful Indian businessmen and entrepreneurs are recruited to visit BIA schools and to offer role models of Indian economic success.

Option 5: Review BIA vocational education to eliminate training for specific jobs that are unlikely to be found on reservations and to emphasize training in basic mechanical and other vocational skills of broad applicability.

Option 6: Incorporate into regular social studies, language and other courses a greater portion of material and course content drawn from business and economic examples.

Curriculum in Indian History, Culture and Government

The first Indian schools were mission schools that sought to convert Indians to Christianity and to persuade them to give up their heathen ways in order to adopt what was seen as a superior modern and Western existence. When the BIA began to operate its own schools, in the late nineteenth century, the goal of education was the complete assimilation of Indians into American society. Even today, while there is an accepted policy of cultural pluralism and Indian self-determination, the BIA-operated schools still devote the great majority of their time and effort to the language, history, culture, values, government and general framework of thought of mainstream American society.

Indeed, this focus is in many ways appropriate. Indian education would serve its students poorly if they did not learn the framework of European and Western culture in school. All American Indians--even those who are most critical of mainstream American society--will have extensive dealings with and are in some measure today part of this society. Yet, there is also a deep desire today on the part of many people to discover their own roots and background. Moreover, Indians have a separate and independent status in American society--unique to them--that encourages greater cultural experimentation and pluralism. Unfortunately, perhaps reflecting the original goal to achieve complete assimilation, BIA-operated schools have on the whole done a poor job in dealing with Indian culture and values.

The curriculum found in BIA-operated schools makes only small concessions to Indian language, history and culture. A course is likely to exist here and there, but BIA education has not placed a great emphasis on teaching Indian children their own tribal history, government and general framework of thought. To some extent, Indians have not wanted the BIA schools to perform this function, believing it better handled outside formal schooling. Yet, as the links to the past are weakened among Indians themselves, and as new Indian beliefs and institutions emerge, it may fall more and more to the schools to preserve the heritage of Indian culture for the young.

The teaching of history in BIA-operated schools is based on textbooks that adopt a non-Indian perspective. The first encounters of white civilization with Indian civiliza-

tion, for example, are largely presented from the white perspective. This non-Indian perspective undoubtedly is an appropriate part of Indian education, but the viewpoint of native Indian societies besieged by superior armament and technology could also be developed. Other parts of Indian history could also be presented from the Indian perspective. Similarly, for those Indian students who may no longer speak their original Indian language, there could be an opportunity in BIA-operated schools for them to gain exposure to and perhaps to learn it.

One reason for the lack of emphasis on Indian history and culture is the shortage of textbooks and other teaching materials. The market is too limited for mainstream commercial publishers--especially when each tribe may have its own history and outlook. The BIA could undertake to provide financial support for the development of new teaching materials. For example, a textbook focused on the history of American Indians, beginning the story with their arrival from Asia 10,000 or so years ago, could be used throughout BIA-operated schools. More specialized materials, such as the history of a particular tribe, might have to be developed locally. Indeed, BIA schools might create school and class projects to develop written materials that could then be passed on and used by succeeding generations of students.

Improvements in the living conditions and the economic development of Indian reservations will depend on effective and stable government of the reservations. For many Indian tribes, self-government at a tribal level is a fairly new experience. The specific political institutions of most tribes have emerged only since the passage of the Indian Reorganization Act in 1934. BIA schools have an important role to play in the evolution of a mature and stable political process on reservations. The curriculum could include materials in tribal law and government and in the political theories and concepts that underlie these institutions. There could also be discussion and analysis of the effectiveness of existing governing procedures on reservations and of alternative arrangements that could be adopted.

The teaching of Indian history, culture and language may be a valuable educational tool, because it motivates students to learn and study materials that they feel are relevant and important to their own personal circumstances and background. Teaching of Indian history and culture in BIA schools also conveys a formal and official acceptance of the importance and legitimacy of this history and culture. On the other hand, Indian children who too often suffer from low self-esteem may find their negative attitudes reinforced in schools that do not teach Indian history and culture.

Putting the matter most pragmatically, significant improvements in the learning of reading, writing, mathematics and other basic skills may depend heavily on changes in the negative attitudes of many Indian children towards school and in many cases even towards themselves. If teaching of Indian language, history, culture and government help to reverse these unhealthy and unproductive attitudes, the justification for such teaching is significantly further enhanced.

If the curriculum of BIA-operated schools is to be altered to incorporate a greater emphasis on Indian language, culture and history, the following options can be considered.

Option 1: Require that each BIA-operated school teach a full year course in the history of all American Indians, once in an elementary grade and again in a secondary grade.

Option 2: Require that each BIA-operated school teach a one semester course in the history of the particular tribe from which its students come.

Option 3: Require that, if sufficient students request it, courses in the local tribal language be made available in each school.

Option 4: Require that each BIA-operated school teach a one semester course in grades seven or eight in tribal government, laws and political processes.

Option 5: Provide grants and other funds to support the development of textbooks and other course materials in Indian history and culture by publishers and other outside sources.

Option 6: Create a program within BIA to develop course materials in Indian history and culture and to distribute these materials to teachers and schools throughout the BIA system.

Option 7: Create a special staff within OIEP responsible for the development and dissemination of curricular materials relating to Indian history and culture.

Option 8: Create a program whereby leading Indian historians and Indian cultural figures are recruited to visit and speak to students in BIA schools.

Option 9: Adopt a policy to encourage the use of Indian cases and examples in reading, writing and other courses not specifically focused on Indian culture.

Option 10: Adopt a program to give special honors, awards and recognition to Indian students with exceptional accomplishments in Indian art, writing, and other areas of Indian culture.

Conclusion

The curriculum of BIA-operated schools needs to enable Indian children to understand and function effectively in the broader society. BIA-operated schools must ensure that their students learn reading, writing, mathematics and other basic skills. It is also vital that Indian children learn the political, legal, and economic institutions of the United States including history and current practice. The students of BIA schools also need to learn about their own Indian heritage and institutions. BIA

schools thus have a burden greater than most schools, because their curriculum must serve at least in part as the literacy transmitter of the heritage and values of two cultures.

FOOTNOTES TO CHAPTER XII

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5. Ibid., p. xvii.

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7. Hudson Institute, prepared for the U.S. Department of Labor, *Workforce 2000: Work and Workers for the 21st Century* (Indianapolis, June 1987), p. 97.

8. National Academy of Sciences, *High Schools and the Changing Workplace: The Employers View* (Washington, D.C.: National Academy Press, 1984), p. xi.

9. Ibid., p. xi.

10. Ibid., p. 20.

11. Ibid., p. 21.

12. Ibid., p. 21.

13. Ibid., p. 22.

14. Ibid., pp. 20-21.

15. Ibid., p. 25.

16. Ibid., p. 25.

17. Ibid., p. 26.

18. Ibid., p. 26.

CHAPTER XIII

Special Programs

All school programs, including the Bureau of Indian Affairs (BIA) schools, have special students with special needs. These students in some cases do not fit the milieu of the typical classroom student. Such special students may need additional or focused instruction in adapting to a formalized school program (Early Childhood Education), comprehending basic skill areas (Chapter 1), overcoming handicaps of various sorts (Special Education), learning English as a second language (Bilingual Instruction), and accelerating academic and arts instruction (Gifted and Talented Programs). This chapter reviews these program areas and the impact each program has on the student population served within the BIA school program.

Early Childhood Programs

Many Indian students attending BIA schools come from socioeconomically disadvantaged, reservation backgrounds that have tended to inhibit their academic success. The backgrounds of these students too often reflect poverty, a non-English first language, family substance abuse and other influences that significantly inhibit their adjustment to and success in the new learning environment of the elementary classroom. Still, these Indian students are expected to perform better than their predecessors as the Bureau raises its academic standards in support of the nationwide movement towards achieving excellence in education.

Steps may need to be taken to bridge the gap for the young Indian student between the familiar home learning environment and the somewhat foreign environment of the elementary classroom. Indeed, educators are increasingly concluding that early education programs offer major benefits in this regard. At least eight research studies exploring the long-term effects of early education programs have been published in the past decade. These studies have consistently shown a positive relationship between attendance of children in early education programs and later academic success. For example, David Weikart, a leading investigator in early childhood research, found that children who participated in effective early childhood programs subsequently exhibited higher employment rates, fewer teen age pregnancies, fewer arrests and lower welfare assistance rates than was true of those students who had not experienced early childhood programs. The best known early childhood study is the High/ Scope Perry Preschool Program[1] that began in 1962 and continues today,

some 25 years later. This longitudinal survey of minority students found the following benefits of participation in early childhood education:

- Participants in early childhood programs were subsequently rated as more motivated.
- Participants placed a higher value on schooling.
- Parents reported greater satisfaction with the academic performance of participating children.
- Participants in early childhood programs had better grades throughout their elementary and secondary school years.
- Participants had fewer school absences.
- Expenditures per capita for special education services were lower for participants.
- Participants had a higher sense of socially belonging.
- More than 66 percent of participants graduated from high school compared with 50 percent of nonparticipants.
- Participants had fewer incidents of misbehavior during their elementary years and at age 15.
- Preschool education pays for itself because participants in programs require fewer subsequent costs for special help.

BIA has had some involvement with early childhood programs for two decades. Beginning in 1968, BIA extended the elementary program to include kindergarten in almost all BIA day schools. In 1972, $600,000 was allocated to establish two pilot projects for Indian children 1-4 years of age. Prekindergarten guidelines were developed and became known as the Parent/Child Development Programs (PCDP). The Pueblo of Acoma and the Mississippi Band of Choctaw Indians were selected as the pilot sites for preschool programs. By 1979, there were 16 prekindergarten programs in BIA schools. However, these programs had all been abandoned by 1984, due to a cutoff of funding availability.

In 1974, a Congressional directive to the BIA under Public Law 93-1292 required the Bureau to provide the "House and Senate Committee on Appropriations an analysis of the need for a program in early childhood (preschool) education together with recommendations for carrying out such a program in the future." In implementing this directive, the Bank Street College of Education received BIA funds to prepare and issue a 1976 report. This report recommended that the BIA establish a comprehensive early childhood education program. The Bank Street report also recommended that the BIA revitalize the K-3 programs to recognize the special sociocultural experiences that Indian children bring to the classroom in their early years of education. However, despite BIA requests from 1977 through 1979 for funding, the BIA was unable to follow up on these recommendations.

In developing the ISEP formula for distributing school operating funds, the BIA in 1979 had to decide whether to include prekindergarten students. In the end, BIA decided against allocating funds for prekindergarten students, because such an allocation would deprive regular K-12 programs of some of their funding.

The BIA effort in the area of prekindergarten education is today minimal. However, some children destined for BIA elementary schools do benefit from preschool programs through Head Start, administered by the U.S. Department of Health and Human Services. Total Federal funding for Indian children entered in Head Start programs was $35.8 million in 1986. Exactly how much of this funding served future BIA students is not known.

The American business community has recently begun to express grave concerns about the State of American education, reflecting a growing need for employees able to read, write, do arithmetic and exercise other basic skills effectively. In its recent report, *Children in Need,* the business-supported Committee for Economic Development (CED) stated that "the seeds of educational failure are planted early. Children who are borne into poverty or overly stressful family circumstances often suffer from a wide variety of physical and emotional problems that can delay normal social and intellectual development or impair their abilities to function effectively in the typical public school setting."[2] The CED report noted, however, that "happily, there is now a growing public awareness of the need to work with at-risk children before they enter the formal classroom setting, and quality preschool education is emerging as a leading issue. About half the States are now investing considerable resources to deliver preschool education to those children who can benefit most from such a head start."[3] The CED stated that "we strongly support quality preschool education for disadvantaged three- and four-year-olds and recommend that the nation continue to expand these programs until every eligible child has the opportunity to be enrolled."[4]

In light of research findings that early childhood programs have significant later education benefits, and calls by national business and education leaders for the expansion of early childhood education, the BIA may want to provide greater opportunity for early childhood education for its students. If so, the following options can be considered:

Option 1: Adopt a BIA policy goal--and seek funding, personnel and other support as needed--that future BIA elementary students should have the opportunity to attend prekindergarten programs for ages three and four.

Option 2: Amend the ISEP formula to include a distribution of funds for children attending BIA preschool programs.

Option 3: Develop a coordination mechanism with Head Start, in order to ensure that Head Start best serves the needs of future BIA elementary students, and to ensure that duplication of BIA and Head Start efforts is avoided.

Option 4: Create a set-aside program whereby some portion of current funds used by Head Start for Indian children are transferred to set up preschool programs within BIA education.

Option 5: Fund a program to instruct principals, teachers, teacher aides and parents in methods of early childhood/preschool education and in ways of improving educational prospects of preschool children.

Option 6: Review existing K-3 programs in order to ensure that these programs are designed to meet the needs of students adjusting to a school environment that is often foreign to their previous experience.

Option 7: Conduct a comprehensive needs assessment of current BIA schools to determine the extent of existing provision of preschool programs and the need for additional early childhood education.

Option 8: Fund a program to encourage tribal groups to establish parent-child early education programs under contract with the BIA, other federal agencies, or other outside agencies. Provide tribes with grant money and technical assistance, as requested and needed.

Option 9: Establish within OIEP an Office of Early Childhood Education, the Office to be headed by a qualified professional in the field of early childhood education.

Option 10: Adopt a BIA policy that a nutrition and health component, along with a parent outreach program, will be included in any BIA early education efforts.

Option 11: Include special programs for handicapped children as part of any early childhood education program. Recommend amending existing laws, if necessary, to facilitate such a program.

Option 12: Include special programs for identifying and aiding gifted children as part of early childhood education.

Option 13: Establish an annual BIA conference or assembly of selected education personnel working in the area of early childhood education.

Option 14: Fund a program for leading experts in early childhood education to visit BIA schools and speak with teachers and other staff.

Chapter 1

Title I of the Elementary and Secondary Education Act of 1965, as amended in 1966, provides for funding of a program to "meet the special educational needs of educationally deprived children on reservations serviced by elementary and secondary schools operated for Indian children by the Department of Interior." The BIA

program is part of the broader Chapter 1 program, the successor to Title I, which is the largest single source of federal funds for U.S. elementary and secondary education, distributing more than $4.0 billion to Chapter 1 programs nationwide in 1986. Under Chapter 1, a child is considered educationally deprived if the child needs special assistance to perform at a grade level appropriate for his or her age, and also comes from a family background that is economically disadvantaged. In the BIA school system, all Indian students are considered economically eligible, but they must also have an academic achievement level below national grade norms to be eligible for participation in the Chapter 1 program.

To comply with Department of Education (ED) guidelines for administering Chapter 1, the Director of OIEP is treated as the BIA counterpart of a chief "State Education Officer" and BIA education as the counterpart of a "State Educational Agency (SEA)." The Director of OIEP has project approval authority and is responsible for the use of Chapter 1 funds in BIA schools. A Chapter 1 office within OIEP informs the Director as to the status of local school projects; maintains liaison with the Department of Education on legal and regulatory aspects of the BIA's Chapter 1 program; interprets laws, regulations and guidelines affecting Chapter 1 programs; provides training to selected Chapter 1 school personnel; and reviews and approves project submissions from schools.

Unlike public school systems, the BIA Chapter 1 program is funded by receiving a share of a one percent set aside of the total Chapter 1 budget. For fiscal year 1987, BIA received $24.8 million. Table 1 shows enrolled, budget and staffing levels for Chapter 1 from 1979 to 1986.

As Table 1 shows, student enrollment in Chapter 1 has been declining steadily (as well as staffing), even while the overall Chapter 1 funding has been about the same or rising slightly. As a result, the cost per student has climbed sharply, and student-

TABLE 1

BIA ENROLLMENT, BUDGET AND STAFFING LEVELS FOR CHAPTER 1

YEAR	STUDENT ENROLLMENT	TOTAL BUDGET	COST PER STUDENT	TOTAL STAFFING	STUDENT STAFF RATIO
1979	26,438	$20,292,000	$ 768	1,491	17.7
1980	24,314	20,194,000	831	1,387	17.5
1981	23,691	19,522,000	824	1,243	19.1
1982	23,545	18,146,000	771	1,286	18.3
1983	23,781	19,893,000	836	1,072	22.2
1984	21,368	21,913,000	1,025	1,015	21.1
1985	18,157	23,224,000	1,279	990	18.7
1986	15,497	22,225,000	1,435	916	16.7

staff ratios have declined. Chapter 1 maintains a policy to encourage the use of computer assisted instruction in the remediation of student deficiencies in mathematics, language arts and reading. However, studies thus far have found it difficult to identify significant educational benefits from computers.

For the last three years, 55 percent of boys and 45 percent of girls in BIA schools have participated in at least one Chapter 1 remediation program. By comparison, nationwide, about 10 percent of U.S. students participate in Chapter 1. Approximately 64 percent of BIA students receive remediation in mathematics, 58 percent in reading skills and 51 percent in language arts. OIEP requires that each Chapter 1 project in its BIA schools develop Individual Education Plans (IEP's) for each participating Chapter 1 student. The IEP establishes goals and objectives for each child, based on his/her skill deficiencies and an individualized plan of action for each student. Chapter 1 also emphasizes parent involvement and schools are required to show how their programs provide opportunities for parental participation.

Chapter 1, along with Special Education, is one of the most closely monitored and evaluated OIEP programs. OIEP staff are required to regularly monitor all BIA Chapter 1 projects. This closer scrutiny and attention has been mandated by law and is possible partly because of the more generous funding of Chapter 1, as compared with most other BIA education efforts.

Chapter 1 students are given standardized tests at the beginning and end of each school year. Table 2 shows the annual gains submitted by schools for their Chapter 1 students since 1979. The gains are shown as increases in the "normal curve equivalent" (NCE) measure. An NCE score of 0.0 indicates that a child is making normal progress in a subject; greater than 0.0 shows that the child is advancing and is making progress toward the objective of achieving at national norms; and gains of 4 NCEs or more suggest a successful program. As shown in Table 2, since 1983 only a few NCE test results have been in the negative range. Gains appear to be increasing since 1983, although 1979 had the greatest overall gains. A major problem has been, however, that many students seem to lose over the summer significant parts of the gains they registered during the school year.

Chapter 1 was developed as a program for a limited number of educationally disadvantaged students who would be given special supplemental assistance of a remedial nature. Under current BIA policy, these students are often separated for a part of the day from other students and work in their own special Chapter 1 facilities, where they are provided with intensive teaching and other support. However, this approach fits the circumstances of BIA schools poorly. In most BIA schools, the great majority of the Indian student body meets the national eligibility criteria for Chapter 1. Decisions by BIA administrators to include some BIA students in Chapter 1, while excluding others, may have little objective basis--and may even be unfair and discriminatory. As it is, Chapter 1 has included as many as 66 percent of all BIA (and contract) school students in some past years, and in 1986 still included 41 percent of all BIA students.

TABLE 2

NCE GAINS IN CHAPTER 1 PROGRAMS
BY GRADE AND SUBJECT: 1979-1986

Gains between fall pretest and the spring posttest.

GRADE	1979	1980	1981	1982	1983	1984	1985	1986
2 LA	7.12	5.68	5.51	3.39	5.12	5.67	6.25	3.78
R	9.15	5.69	.25	2.80	3.05	4.60	4.92	1.56
M	7.13	10.51	.06	5.41	6.81	6.47	5.44	6.03
3 LA	11.12	6.72	3.65	-5.76	6.24	5.93	7.44	7.11
R	6.35	5.45	1.18	-1.85	4.76	6.92	6.58	5.19
M	14.38	9.05	-1.06	-2.55	6.46	6.83	7.20	9.20
4 LA	7.97	4.65	3.13	4.49	4.58	5.78	4.39	4.60
R	6.16	4.65	2.11	4.18	6.00	4.95	4.57	4.33
M	9.06	5.88	5.56	8.56	7.51	9.64	7.62	8.88
5 LA	7.10	3.40	1.93	1.63	3.11	3.52	5.34	4.87
R	4.74	2.96	1.33	.68	4.26	3.59	3.85	2.24
M	10.16	4.25	-1.69	.08	7.62	9.02	7.19	6.23
6 LA	14.75	6.21	1.65	2.38	5.41	5.47	7.67	6.11
R	9.94	6.36	3.05	1.81	3.66	4.97	4.57	4.08
M	11.06	7.30	1.91	2.72	6.26	6.61	6.92	5.82
7 LA	7.48	5.23	-1.85	-1.35	4.45	5.23	5.49	5.22
R	7.03	3.11	.99	-.63	4.43	3.60	4.91	4.28
M	11.09	4.57	4.86	1.59	6.57	4.41	6.21	5.89
8 LA	5.78	2.79	.14	.79	3.79	5.37	3.13	4.53
R	9.94	3.03	1.68	1.30	4.02	3.44	4.11	3.14
M	8.60	7.46	3.00	-.23	4.62	3.44	2.83	3.38
9 LA	5.35	4.03	5.31	2.94	5.43	4.28	4.52	3.41
R	1.56	4.84	2.71	2.26	1.17	1.12	1.80	2.91
M	7.58	8.74	4.81	3.40	2.90	3.29	4.11	2.60
10 LA	-.99	3.25	3.47	1.50	4.68	2.92	4.56	3.74
R	.76	3.30	4.61	-.48	4.24	3.90	1.40	4.27
M	4.13	5.87	4.05	2.74	2.59	2.74	-1.54	3.50
11 LA	4.59	3.04	4.47	-1.77	3.81	2.96	5.49	5.29
R	1.40	3.09	-3.12	-4.58	2.27	2.30	2.71	6.67
M	4.60	7.24	7.98	-4.79	2.92	2.12	3.15	2.96
12 LA	6.62	4.97	1.25	-6.00	5.49	4.87	6.68	4.06
R	4.44	4.62	-.18	.51	2.72	6.48	6.56	4.97
M	3.52	5.87	2.70	-5.85	2.30	5.43	2.15	4.38

LA = Language Arts; R - Reading; M = Mathematics

When somewhat less than half of all students are entered into Chapter 1, yet the great majority of all students meet eligibility requirements, it may make little sense to distinguish Chapter 1 students from other students and to favor Chapter 1 students with special teaching, equipment and other advantages. Educationally, it can also be disruptive to schools to maintain artificial barriers. Separate classrooms are widely provided by BIA to which Chapter 1 students are sent for part of the day. In these classrooms, there are more instructional aides and other forms of assistance. Thus, some schools provide computer equipment for those students in Chapter 1, while computer use by other students is less available because the latter students are not identified as Chapter 1 students. In some sense, most of the BIA education program is a special program that contains a majority of students with special needs similar to the nationwide pool of students eligible for Chapter 1.

Improvements in Chapter 1 could address the basic intent of Chapter 1 legislation as it is applied to BIA schools or could seek incremental improvements in the existing program. Some of the options include:

Option 1: Legislatively change the law to declare the entire BIA education program a Chapter 1 program, and transfer existing BIA Chapter 1 funds into the financial base for the distribution of funds to schools under the ISEP formula. The special rules and requirements for distinguishing Chapter 1 students from other students would be eliminated.

Option 2: Establish legislative criteria--or BIA administrative criteria, if feasible--by which certain BIA schools could qualify the entire student body for Chapter 1. Such schools would then receive Chapter 1 funds based on the total number of students, and would eliminate any Chapter 1 distinctions among students in their programs.

Option 3: Establish a performance standard for Chapter 1 teachers that measures the instructor's success in helping Chapter 1 students to achieve results closer to national norms on standardized achievement tests.

Option 4: Use Chapter 1 funds to support a concerted effort to improve and upgrade remedial knowledge and methods in BIA education. Add further personnel, develop networks and linkages with university and other researchers, and use the central Chapter 1 office as a principal instrument for developing and disseminating remedial and other teaching techniques especially appropriate to the needs of BIA students.

Option 5: Improve the monitoring of test scores and educational progress generally of Chapter 1 students, and conduct a study to assess the long run impact of Chapter 1 on the educational achievements of BIA students.

Option 6: Improve networks of communication among BIA Chapter 1 programs, possibly including computer linkages among Chapter 1 program personnel, a Chapter 1 national BIA newsletter, conferences for selected BIA Chapter 1 personnel, and other steps.

Option 7: Create a Southwest and a Great Plains regional Chapter 1 center to provide a field base for highly skilled OIEP Chapter 1 staff to provide on-site technical assistance to Chapter 1 programs at the local school level.

Option 8: Include a Chapter 1 coordinator on the staff at each Agency.

Special Education

The BIA education program has the responsibility to provide equitable services to all students, including handicapped Indian children. However, prior to 1975 services provided to special need students were at best fragmented. Significantly handicapped children were often not served by BIA schools and were placed in noneducational institutions by the BIA's social services programs. The institutions were to provide the necessary specialized services for Indian handicapped students that the BIA schools could not provide. But in practice the physical therapy or speech and language training, for example, that a handicapped child might require was not necessarily provided by these non-BIA institutions.

Enactment of the Education of the Handicapped Act of 1975 significantly altered the provision of education for handicapped children in BIA schools--as well as in public schools throughout the nation. This 1975 Act provided Federal funding to assist what are widely known as "special education" programs for handicapped children. Along with Chapter 1, special education funds are a major source of federal financial support provided to the nation's schools. In 1986, total federal funds provided for special education equalled $1.2 billion on behalf of 4.1 million students, about 9 percent of the total U. S. elementary and secondary student population.

Unlike public schools, the BIA receives a special set-aside which provides 1.25 percent of total special education funds to the BIA program (raised by Congress in 1986 from the previous level of 1.0 percent). Table 3 shows the funding levels provided by the Department of Education and numbers of BIA students entered in special education programs since 1976. In 1976, the first year of ED funding under P.L. 94-142, (the Education of the Handicapped Act), there were 949 students entered in special education programs in BIA-funded schools. By 1987, there were 6,205 students in special education programs in these schools. Furthermore, 269 handicapped children required placement in outside institutions. Total BIA special education funding under P.L. 94-142 rose from $1.0 million in 1976 to $16.5 million during 1987-1988.

Department of Education funds are not the only important source of funds for BIA special education. Indeed, the ED funds are intended to be only supplemental funds. The basic source of funds for educating handicapped children in BIA schools is the special weights for these children in the ISEP formula. Under the ISEP formula, schools receive for each handicapped child the basic ISEP payment per student that

TABLE 3

SPECIAL EDUCATION FUNDS RECEIVED BY BIA FROM THE DEPARTMENT OF EDUCATION AND PARTICIPATION [1]

Year	Total ED Funding (mm)	Special Education Students Served Within BIA-Funded Schools	ED Funds Per BIA-Funded Student
1976	$1.0	949	$1,054
1977	2.0	N/A	N/A
1978	8.0	N/A	N/A
1979	8.0	4,839	1,653
1980	8.0	4,625	1,730
1981	9.1	4,858	1,873
1982	9.2	4,576	2,010
1983	9.6	6,027	1,593
1984	10.6	4,964	2,135
1985	11.2	5,927	1,889
1986	11.5	6,205	1,853
1987	16.5	N/A	N/A

[1]Funds provided under the Education of the Handicapped Act of 1975 (P. L. 94-142). DOE assistance is forward funded, so that 1987 funds, for example, are for the 1987-88 school year.

all students receive, plus a special supplementary ISEP payment to cover the costs of special school assistance for the handicapped child.

For example, a child in fifth grade and classified as having a major "specific learning disability" in 1987 would have received the basic ISEP distribution of $2,230 per student, plus a special ISEP payment for children with such disabilities also equal to $2,230. The total amount received by the school for a student with a major learning disability would be $4,460 for each such student. In 1987, there were 890 students in BIA-funded schools classified as having major learning disabilities that required full-time attention. The schools where these 890 students were enrolled received special allocations of ISEP funds that totalled $2.0 million.

As shown in table 4, there were numerous other categories of handicapped students that received special ISEP distributions. There were 1,414 handicapped students receiving full-time service for whom $4.7 million in ISEP funds were distributed. There were also an additional 4,791 students receiving part-time assistance for whom $4.1 million in ISEP funds were distributed. Total ISEP distributions of funds for special education programs for handicapped children in 1987 equalled $8.8 million.

Under the provisions of the Education of the Handicapped Act (as amended by the Educational Amendments of 1986), the BIA's special education program is required to offer a free appropriate public education for all children. If needed, a comprehensive set of special education services are made available to the special needs student from the first year entering a BIA school (which in some cases is pre-kindergarten) until graduation from a secondary BIA school, voluntarily withdrawing from school or attaining the age of twenty-two. The services provided follow an individually designed educational and therapy (physical and/or occupational) program, called an Individualized Education Plan (IEP). Elements of the plan may include psychoeducational assessment; medical and psychological services; speech and language training; and vocational education.

Special education program oversight is provided by the Branch of Exceptional Education from OIEP's Central Office in Washington, D.C. From Washington, the branch chief and staff submit reports annually in order to comply fully with reporting requirements. The OIEP Branch of Exceptional Education works closely with the BIA's National Advisory Committee to address special education issues affecting the quality of special education programs designed for Indian students, answering congressional queries, and drafting of the congressional annual report. The Branch has developed special education regulations for local schools to follow in implementing their special education programs. Additionally, the OIEP office conducts the monitoring activities, along with Agency staff.

In 1986, Congress mandated that preschool special education services be provided for handicapped children, ages 3 to 5, as well as increases in the required level of public participation. The BIA Branch of Exceptional Education is currently working to implement this directive. This Branch is also responsible for developing an annual plan which is submitted to the United States Department of Education. The plan includes policy statements, goals and timelines, program priorities, child identification procedures, individualized education program methods, private school placement procedures, and other elements. After the plan is approved by the Department of Education, the document is sent to all Line Officers (ASEs and EPAs), in addition to special education staff at local schools. The document is essentially a functional practices and procedures guide for special education programs from the national OIEP level, the Agency level and local school level.

The OIEP special education program is well regarded by independent observers. It has been able to attract a group of professionals who provide responsive and timely services to the special education student constituency. The program emphasizes com-

TABLE 4

1986 NUMBER OF ISEP-FUNDED HANDICAPPED STUDENTS AND ISEF FUNDS PROVIDED FOR HANDICAPPED STUDENTS

Type of Handicapped Program	Number of ISEP-funded Handicapped Students	Total Special ISEP Funds[1]	Special ISEP Funds Per Student
Full-time High Service Level			
Deaf	3	$20,070	$6,690
Blind	2	13,380	6,690
Severely multi-handicapped	107	715,830	6,690
Sev/profoundly retarded	19	127,110	6,690
Sev. emotionally disturbed	116	776,040	6,690
Special learning disability	890	1,984,700	2,230
Mentally retarded	277	506,210	2,230
TOTAL FULL-TIME	1,414	4,254,840	3,009
Part-time Moderate Service Level			
Emotionally disturbed	112	124,880	1,115
Specific learning disability	2,361	2,632,515	1,115
Mentally retarded	76	84,740	1,115
Multi-handicapped	52	57,980	1,115
Hard of hearing	15	8,370	558
Visually handicapped	7	3,906	558
Orthopedically handicapped	23	12,834	558
Other health impairment	38	21,204	558
Speech impairment	2,107	1,175,706	558
TOTAL PART-TIME	4,791	4,121,040	860
Residential handicapped ass't.[2]		440,425	1,082
GRAND TOTAL	6,205	8,816,305	1,421

[1]Includes ISEP funds for special handicap services only. Each handicapped student received in addition to these special funds the basic grant of ISEP funds provided for each student (equal to $2,676 per student for grades 1 to 3, to $2,230 per student for grades 4 to 8, and to $2,899 per student for grades 9 to 12 in 1987).

[2]Includes assistance provided to handicapped boarding students for the residential element of their program. Also includes assistance provided to 11 dormitory residents who attended public school.

munication laterally among peers--say from Agency to Agency or from school to school. Further, the OIEP Branch sees that regional meetings and occasional national meetings are held for exceptional education coordinators and staff to keep apprised of the latest developments in the field.

Despite these strong features, some concerns do exist with respect to the BIA special education programs. The ED program of federal assistance under the Education of the Handicapped Act was designed as a supplementary program. Nationwide it currently contributes around $340 of the estimated $4,350 average excess cost per child associated with educating handicapped children today. Hence, ED funds are a minor part of the nationwide financing of special education-- contributions are about 8 percent of the total special education funding.

In the BIA system, however, ED funds substantially exceed the basic contribution from ISEP funds. In 1987-88, total special education funding from ED will equal $16.5 million, while special education funding from ISEP equalled $8.8 million in 1987 and will probably be similar next year. In contrast to public schools, it would be more strictly correct to say that ISEP funds increasingly will be supplementing ED funds. Total annual spending for special needs of BIA handicapped children is currently around $4,000 per student, a little less than public school spending.

With the funds available, BIA-funded schools were able to accommodate 16.2 percent of their students in special education programs in 1986-87. Many more BIA students have learning handicaps of one form or another and might have benefitted from special attention. Nevertheless, the nationwide average was about 10 percent of all students participating in special education, significantly lower than the BIA-funded participation rate.

In the past, the General Accounting Office has expressed concern about the provision of special education programs for students who have slight handicaps and who basically appear indistinguishable from the normal student body. In 1982, GAO reported that Congress "fears that a disproportionate share of funds might be allocated to the learning disabilities category (the magnitude of which is not clearly known or understood) seem to have been realized with the lifting of the 2 percent cap on the number of learning disabled children who can be counted for Federal funding purposes."[5] This characterization seems to hold true for BIA-funded schools. In 1987, fully 52 percent of all BIA recipients of ISEP special education handicap funds qualified because they were classified as having a "special learning disability" of some sort. In general, among BIA handicapped students, many are included in broad classifications that allow considerable leeway for interpretation.

The inclusion in special education classifications and programs of students who may be only slightly handicapped can have some adverse educational consequences. For one thing, it provides one set of students with significantly more funding, teacher assistance and other resources. Yet, these students may differ little from many other students not receiving special funding--introducing elements of potential discrimina-

tion and resentment within the student body. Moreover, the concentration of larger funds on a select group of students, some of whom may be minimally handicapped by conventional standards, almost inevitably means that the funds are not used as effectively for educational purposes as would be possible if these funds were spread across all students who have learning problems.

In order to address the issues raised by GAO and others with respect to special education programs, the following options can be considered:

Option 1: Review the students classified as handicapped because they have a "special learning disability," in order to ensure that these students have handicaps severe enough to distinguish them from other students and to qualify for special funding.

Option 2: In a similar fashion, review other classifications that may involve slight handicaps, and where students may be overrepresented in special education programs.

Option 3: Rather than Options 1 and 2, expand the number of students in special education programs to include all students with meaningful learning handicaps, recognizing that 25 percent or more of students may qualify.

Option 4: Seek to develop ways in which special education students can be better served in the normal classroom, without segregating them from other students.

Option 5: Revise rules and regulations to diminish barriers between special education and other students, allowing greater utilization of special education facilities and personnel by all students in appropriate circumstances that serve both special education and other students.

Option 6: Explore the possibility of revising the ISEP formula to reflect the practical reality that in BIA-funded schools ISEP funds are supplemental to ED special education funds.

Bilingual Education

Requests for bilingual programs in BIA schools have come from a number of sources: tribal leaders, educators, BIA officials, Congressmen, parents and linguists. Their concerns have reflected two objectives with respect to American Indian communities. First, some observers have seen the objective as restoring native languages in danger of extinction -- a part of a broader effort to revitalize the cultural heritage for community members. However, most of the support for bilingual programs has reflected a second objective, to meet the needs of children who were currently entering school speaking a native language. Rather than past policies to suppress or ignore native Indian languages, educational results might be improved by working with the native language that many children bring to their first grade classroom.

The first programs that might be considered bilingual were developed during the New Deal years when John Collier was BIA Commissioner. These programs were phased out, however, shortly after Collier left the BIA in 1945. Then, in the 1960s bilingualism surfaced again as an area of active interest among all U.S. educators. Hispanic and Indian leaders sought bilingual education programs that would be provided along with the regular academic curriculum. In 1968, Congress enacted the Bilingual Education Act (formally Title VII of the Elementary and Secondary Education Act) to establish a supporting classroom environment for children whose first language is not English. The Act authorizes the Department of Education to make competitive grants to local school districts, including BIA schools. At first, the Act linked bilingual programs to minority "disadvantaged" students who came from low-income families, but the low-income provisions of the Act were removed in 1974. The latest amendments in 1984 further extended the Act to provide funds in three bilingual program areas: "developmental/maintenance" programs, "transitional" programs and "immersion/special alternative" programs.

Of the three types, BIA schools have tended to focus on transitional bilingual programs. Such programs seek to deemphasize use of native languages while encouraging a transition to English language use. The transitional emphasis generally parallels the approach of English as a second language, but puts a higher priority on the native language and culture. The transitional model has been employed in the Choctaw BIA Schools. The program serves 139 K-3 Choctaw students who enter the program as dominant Choctaw speakers with marginal English-speaking skills. The program uses the "pull-out" approach to instruct children. The lead teachers are specialists in English as a second language who have instructional support provided by Choctaw-speaking aides.

The Choctaw program recognizes that effective bilingual programs do not operate alone. The Choctaw approach extends the classroom learning environment to the community, where the bilingual faculty seek active parent participation. Parents are offered training in English reinforcement skills so that they can help expand the teaching and learning process from the classroom to the home environment as well. Parents are also encouraged to observe bilingual classroom instruction in order to obtain a better understanding of the basic approach of the program and to observe firsthand the progress of their child. Of 96 percent of the entering first grade Choctaw students who were not English proficient, all of the students were tested as English proficient after only two years of instruction. After three years of instruction, 82 percent were fluent English speakers, as measured by the Language Assessment Scale. California Achievement Test scores also indicated significant gains.

Although most bilingual programs use the transitional mode, increasingly programs are also considering the maintenance approach. The maintenance approach most accurately reflects the bilingual concept of dual or concurrent development of two languages--for Indian studies, instruction in both the native language and in English. The maintenance approach has been implemented with good results at a contracted school, the Rock Point Community School in Arizona. Graduates of the Rock Point

program can read and write in Navajo and have typically shown superior test scores, compared with other Indian students who have not participated in bilingual programs.

The total number of fully developed bilingual programs currently operational in BIA and contract school programs is only nine, down from a high of 17 bilingual programs in the mid-1970s. The Department of Education finds an unmet need for bilingual programs for minority students from many communities. This need is particularly strong for many American Indian students who come to the classroom with no or little English ability. ED officials point out that few of the eligible BIA schools are taking the time to apply for grant monies to which their school programs are eligible. In light of the gains achieved by the few bilingual programs in place in BIA educational and contract schools, it may be appropriate for BIA and contract school officials to investigate the possibility of creating bilingual programs for their students.

Although there are only a few formal bilingual programs in BIA-funded schools, substantial funds are distributed to BIA-funded schools for the purpose of bilingual education. The ISEP formula adds an additional 20 percent to the basic student allocation for each student entered in a bilingual program. In 1987, ISEP supplemental funds were distributed to support bilingual programs for 8,651 BIA-funded students. ISEP funds distributed to pay for bilingual education programs equalled $3.86 million.

It appears that the bilingual education funds provided by the ISEP formula are largely being used to support the basic education program of schools that have non-English speaking students. Fully 22.7 percent of students in BIA-funded schools are shown as receiving ISEP supplemental funds for their bilingual education. Yet, no bilingual coordinator currently exists in the OIEP Washington office, nor does bilingual education receive much emphasis in Agency offices. Regulations also have not been issued, specifying necessary content and procedures to qualify as a bilingual program.

If a greater use of bilingual programs is to be introduced in BIA and contract schools, the following options can be considered.

Option 1: Significantly tighten the standards by which students qualify under the ISEP formula as participants in bilingual education. Limit ISEP funding to those students that receive special supplemental assistance from a recognized bilingual program, or its practical equivalent.

Option 2: Direct all schools that do not have bilingual programs, but have bilingual-eligible students, to conduct a comprehensive needs assessment to examine the possible creation of such a program.

Option 3: Establish an OIEP bilingual coordinator based either in Washington or a central field location. The coordinator would assist schools in developing need assessments, grant applications and other technical assistance, as requested.

Option 4: Upgrade bilingual education within the BIA by adding personnel expert in bilingual methods, developing networks and linkages with university and other researchers in bilingual education, creating newsletter or other vehicles for disseminating information about bilingual education within BIA, holding conferences of BIA personnel involved in bilingual efforts, and other steps.

Option 5: Fund a program of research into bilingual methods specifically tailored to those Indian children who speak languages that are encountered almost exclusively among children served by BIA schools.

Gifted and Talented Programs

Educators have long been aware that selected children have the ability to learn at an accelerated pace, while others have exceptional creative and other gifts. The term "gifted and talented" has evolved to describe these children. One educator identifies such children as those who "exhibit outstanding ability or talent in a variety of areas including general intelligence, specific aptitudes, creativity, leadership, or artistic ability, and who have been identified as possessing such ability by professionally qualified individuals such as teachers, psychologists, or others with special training in the area of the child's special talent." Nationally, the children that fit this definition are estimated to be between three percent and five percent of elementary and secondary students.

A 1987 BIA Task Force on the Gifted and Talented explored the need for a BIA-wide program. The Task Force estimated that 3.5 percent, or about 1,400 students in BIA-funded schools, might be identified as gifted and talented. The BIA Task Force identified a pressing need to establish an ongoing gifted and talented program as more students in more schools are achieving above national norms, and more students could benefit from the opportunity to develop their talents in BIA and contract school programs.

Currently, almost no funding is formally provided by the BIA for gifted and talented Indian students. A few schools offer gifted and talented programs virtually without an operating budget. A limited annual allocation ($150,000) was made available to support four pilot projects for the 1985-87 school years. These demonstration projects were located at Southern Pueblos Agency schools, Chemawa Indian School, Navajo Mission Academy and Ojibwa Indian School. They were generally considered successful as students showed significant gains in test scores and informal teacher and student assessments were positive. However, no funding has been provided for these programs for the 1987-88 school year. For the fiscal 1989 budget, a request of $1.5 million for gifted and talented programs is included.

As a result of past cutbacks, for example, Chemawa Indian School lost its gifted and talented coordinator and its program. Under the program, students who had been identified as academically gifted had completed college level courses, written books and published articles. In the talent area of the program, student-participants published poetry and exhibited art work. Independent work studies were created for several students to help them connect their interests and abilities to real world situations.

Even without funding support for the high achieving student, some BIA-operated and contract schools have found other ways to support gifted and talented students. Some teachers and school administrators at a number of BIA-operated and contract schools spend part of their personal time--beyond normal school hours--developing instructional materials and programs for students whom they have identified as gifted and talented. Examples of gifted Indian students who have benefited from the support of one or more school mentors include:

- A student was selected for the 1987 Press Award for achievement in journalism. Chief Bug-O-Nay-Ge Shig School in Cass Lake, Minnesota.
- An eighth grader placed first nationwide in her grade cluster (7-8) in a national essay competition sponsored by the United States Department of Education on "What the Constitution Means to Me and My Country." Tuba City Boarding School in Tuba City, Arizona.
- A senior art student won the Grand Champion award at the Carnegie Indian Art Show. Another senior won the Native American Current Events competition at the 1987 Indian Academic Olympics held in Muskogee, Oklahoma. Riverside Indian High School in Riverside, Andarko, Oklahoma.
- Six seventh grade students were selected to participate in the National Talent Search Program for gifted students. Cherokee High School in Cherokee, North Carolina.
- Seven students were selected to participate in the Region IV Academic Decathlon. Phoenix Indian High School in Phoenix, Arizona.
- Four high school students were selected to represent the entire Los Angeles area at the State of California's Principal Meeting. Students were selected because of their outstanding academic achievement and involvement in student affairs. Two outstanding seniors received the Buddy Rogers Academic Scholarship to attend Stanford University. Two other seniors received the Elizabeth Kempthrone Creative Writing Scholarship. Sherman Indian High School in Riverside, California.

In considering possible selection criteria for the gifted and talented, the BIA Task Force mentioned above concluded that the local school and community should jointly establish and implement procedures for nomination, assessment and selection of their most capable students. Nominations would be based on evaluations from teachers, support staff, parents, students and members of the community and final

selections made by a broadly based committee (including diagnosticians, teachers, agency/school administrators and other professionals). Based on similar state programs and other factors, the Task Force recommended funding of $1,115 for each gifted and talented student involved with the BIA program. In order to serve around 1,400 BIA gifted and talented students, this would require total funding of $1.6 million.

If greater efforts are to be made to help gifted and talented students, the following options can be considered:

Option 1: Make a policy decision to establish and adequately fund a BIA gifted and talented program.

Option 2: Introduce a new weight in the ISEP formula providing supplemental funding for students entered in special programs outside the normal curriculum that serve the needs of the gifted and talented.

Option 3: As a short run measure, provide the necessary funding to continue the four gifted and talented demonstration projects that received funds from 1985 to 1987.

Option 4: Convert the Sherman High School, an existing off-reservation boarding school in Southern California, to a special boarding school serving only gifted and talented Indian children.

Option 5: Create a position of gifted and talented coordinator in the OIEP Central Office in Washington. Provide a network of communication among gifted and talented efforts within BIA schools.

Option 6: Develop training programs for BIA teachers in handling gifted and talented students, including visits by university and other experts in the gifted and talented field to BIA schools.

Option 7: Establish formal procedures for identifying gifted and talented children at an early age, and create special courses and teaching efforts to serve the needs of those children.

Conclusion

Some of the most important work in BIA education occurs in the special programs developed for students with special needs. These students often require extra time and attention of their teachers, as well as other special help. Reflecting their greater needs, students in special programs typically need considerably more funding support than other students. Several BIA-funded programs have been developed to meet the social obligation to serve students with special needs and funding requirements.

However, some of these programs have not worked well in the circumstances of BIA education. Chapter 1 program provides funds for some BIA students, but the great majority are potentially eligible. Chapter 1 introduces artificial distinctions and treatment of students in BIA schools. Special education serves a more limited student population, but to a lesser degree still creates some related problems.

The availability of greater funds for special programs has created pressures and incentives to quality as many students as possible for these programs. However, if many students with only minor problems or slight handicaps are entered into special programs, this generates inequities and inefficiencies in the use of total education funding. Another concern is that some deserving students with special needs in BIA-funded schools are not currently having their special needs served. This may be the case, for example, for gifted and talented students. There is also little general support available at present to meet preschool needs and to provide for early childhood education (other than handicapped children). A program of outreach to parents to educate them in ways of helping their young children to do better in school might also be very helpful. Given the large amounts of funds presently devoted to special programs, it is important to examine these programs and whether their existing procedures and rules best serve the current priorities of BIA-funded schools.

FOOTNOTES TO CHAPTER XIII

1. John Berrueta-Clement, et.al., *Changed Lives: The Effects of the Perry School Preschool Program on Youths Through Age 19* (Ypsilanti, Michigan: The High/Scope Press, 1984), pp. 1-105.

2. Committee for Economic Development, *Children in Need: Investment Strategies for the Educationally Disadvantaged* (New York, 1987), p. 21.

3. Ibid., p. 21.

4. Ibid., p. 3.

5. U.S. General Accounting Office, *Disparities Still Exist in Who Gets Special Education* (Washington, D.C., September 30, 1981), p. V5.

Chapter XIV

Toward Effective BIA Schools

The overall goal of Bureau of Indian Affairs (BIA) education today is the development of effective BIA schools, relying on the principles and methods that have been demonstrated by the effective school movement. Building effective BIA schools will require a sustained commitment to make improvements in a number of areas. Previous chapters have raised a wide range of options and presented data and analysis to assess these options. In this concluding chapter, the intent is to highlight a few of the main themes of previous chapters and to propose some especially important goals that, if implemented in the near future, might assist the BIA in achieving excellence in its schools, while at the same time building upon the sociocultural background the Indian student brings to the classroom. Following public review and comment on the Final Review Draft, and consultations with tribal leadership, school boards and other affected parties, final goals and other final policy decisions concerning BIA education will be set forth in the Final Report.

The proposed goals for revitalizing Indian education within the Office of Indian Education Programs, as listed below, are offered to guide tribal, public and Bureau discussions and are not intended to represent any priority ordering.

Proposed Goal 1: Incorporate the Elements of Effective Schools into All BIA-Funded Schools.

The following is a brief statement of the characteristics that have been found to be associated with effective schools:

- Strong educational leadership, including especially the superintendent at the district level and the principal at the school level. The leadership establishes clear goals and becomes heavily involved throughout the instructional delivery process.
- A high expectation among teachers that all students are capable of achieving the educational objectives set for them.
- A system of clear instructional goals by which student performance is systematically monitored and assessed.

- A strong emphasis on the learning of basic skills and high levels of student time-on-task. Establishing a curriculum responsive to the academic and career development needs of the student.
- A safe and orderly school environment.
- A clear sense among teachers and students of the educational mission and purpose of the school.
- Close involvement of parents and the local community in the educational process.

Incorporating these characteristics into each Bureau school will do much to improve the educational achievement of each student. Such characteristics of effective schools will help staff and students feel a sense of common accomplishment and of common purpose. The community must have wide opportunity to become involved in school activities.

Proposed Goal 2: Develop Stronger BIA Educational Leadership at All Levels

Effective schools depend on a school environment conducive to teaching and learning. In creating such an environment, the role of the school principal as the instructional leader is critical. Principals must devote much of their time to overseeing their school's academic program, perhaps leaving less time for nonacademic functions. To do so, principals, with the cooperation of their Agency Office and Washington, need to establish efficient ways of managing school facilities, budget and reporting requirements. The BIA should seek to minimize paperwork burdens on principals. Further, building effective BIA schools requires the selection of principals with strong leadership abilities and a vision to achieve excellence in their schools. New recruiting mechanisms and training methods may be necessary to assure strong principal leadership in BIA schools. It may require that principals, like teachers, receive higher compensation to attract and retain highly capable school leaders. At present, turnover of principals is so rapid in many schools as virtually to preclude effective instructional and administrative leadership.

Additionally, obtaining effective principals depends on skillful recruitment and selection efforts by the Agency Superintendent for Education. Obtaining effective Agency Superintendents in turn depends on wise decisions and strong leadership exercised by the Director of the Office of Indian Education Programs in Washington, D.C. Indeed, a revitalized leadership throughout BIA education is needed. Systems of evaluation of leaders are needed to ensure that those unable to provide effective leadership are placed in positions more suited to their skills.

Proposed Goal 3: Improving Teacher Compensation

Teachers are the heart of the educational process. Yet, BIA teachers are paid more than 25 percent below national public school averages. In some cases BIA teachers also pay more for housing, health insurance, and other benefits. While receiving less pay, BIA teachers are often asked to live in remote, isolated areas in housing that is in poor repair. The high turnover rate and difficulties in recruiting BIA teachers should come as no surprise in light of financial, instructional and geographical constraints.

The BIA has lost as many as 50 percent of its professionals in a two-year period. The educational task BIA teachers face is one of unusual complexity and challenge. Educating Indian children, many of whom may not speak English on arrival at school, requires strong motivation and a high level of teaching skill. BIA teachers thus need to be even more professionally qualified and effective than the average public school teacher. A critical first step in building effective Bureau schools would be to improve overall teacher compensation. BIA should also take steps to ensure that it recruits and retains teachers of the highest educational skills and competence. Chapter XI presented some specific options for the accomplishment of this goal.

Proposed Goal 4: Establish Greater Internal Communication and Training

At present the BIA schools function as largely autonomous units. Below the Agency level, in particular, there is little sense of participation in a joint educational undertaking. To some extent, the problems of each school are unique, yet all BIA schools are engaged in a common enterprise of Indian education. They would benefit from BIA education newsletters; conferences and assemblies of BIA teachers and administrators; active participation in national professional organizations; visits by school staff to other schools; and other forms of internal exchange of views and ideas.

In addition, BIA education could sponsor leading educators to visit schools. In-service training programs could be expanded and improved. The Office of Indian Education Programs could support greater research within its own organization. One approach would be to establish an OIEP research unit that could study the special problems of Indian education, help coordinate outside research and assist OIEP in developing a nationwide network among educational researchers in order better to inform school faculty on research findings that might be applicable to their classroom situations.

Proposed Goal 5: Examine the Numbers and Levels of Compensation of Nonprofessional Personnel in BIA Schools

BIA-funded schools are receiving above-average funding per student, compared with public schools. Even when allowance is made for boarding programs, long transportation distances, small schools, and other high-cost factors, BIA funding still exceeds the U.S. public school averages by around $1,000 per student or more. Given current pressures on the entire Federal budget, BIA schools are unlikely to receive much higher funding levels in the future. If BIA schools need additional funding to support higher teacher pay, in-service training, and other educational goals, these funds may have to be found by reallocations within the existing BIA education budget.

One prospect for making more funds available that requires examination is to reduce the employment numbers and levels of compensation for nonprofessional personnel. BIA-operated schools have more than twice as many total instructional (nondormitory) personnel per student, as compared with public schools. One reason is that education aides constitute 26 percent of current BIA school employees, whereas classroom aides constitute only 7 percent of total public school staff. If adopted, any such goal should be implemented solely by attrition and no existing job holder should lose their job. Similarly, no current employee should suffer a wage reduction, but newly hired cooks, bus drivers, and other nonprofessional employees might receive lower job classifications and compensation.

Proposed Goal 6: Take Steps to Establish a Working Group to Revise the ISEP Formula in Light of Changing Educational Priorities, Philosophies, and Other New Circumstances

The ISEP formula for distributing funds will be 10 years old in 1989. It may be time to revise this formula to take into account changing educational circumstances.

A number of problems with the formula have attracted attention. It contains no funding for preschool children nor for gifted and talented children. More than 20 percent of BIA students qualify for about $550 per year of bilingual funding, even though few formal bilingual programs exist. Funding currently received from the Department of Education under the Education of the Handicapped Act reaches levels that are more than simply supplemental to existing programs.

The documentation of the actual costs of educating different grade levels was incomplete in establishing the original ISEP funding differentials by grade. Questions have been raised about the appropriateness of these differentials, as well as the amounts of ISEP funding provided for the needs of boarding students who require residential facilities. A revised set of weights thus may be appropriate for the ISEP formula.

Some other revisions may also bear examination. Using the student attendance during "count week" provides a maximum figure, but may not be a realistic measure of educational burdens on each school. Moreover, there is no real financial incentive for BIA schools to make strong efforts to keep students in school for the rest of the year. As soon as technically feasible, shifting to an ISEP distribution of funds based on average daily attendance (ADA) or average daily membership (ADM) of each school would create that incentive.

Routine operation and maintenance are part of the normal business of running schools throughout the nation. Rather than the existing separate accounting and distribution for school O&M, the funding for O&M could be made available to schools by adding it to the ISEP formula. Schools could then make their own routine O&M arrangements and contracts. O&M responsibility might not only reduce costs significantly but might yield more responsible O&M delivery. Decision making on educational programs and its O&M in the long run may best be left to those responsible for the local educational programs or system of Agency schools.

Another factor that may bear consideration is incorporating into the formula some relationship to public school costs in the nearby vicinity.

Proposed Goal 7: Continue to Encourage Students to Attend Local Day Schools

Boarding students cost $3,000 or more per student to educate and house than day students. For many students the alternative to a boarding school may be a small day school in a remote area. Such a small school may fit into and receive strong support from the local parents and community. Even if small day schools have above-average costs per student compared with other day schools, the costs per student of small day schools typically will be much below the costs per student of boarding schools.

Proposed Goal 8: Encourage a Continuation of the Growth in Enrollment in Contract Schools

Contract school enrollment has grown from 2,799 students in 1975 to 11,202 students in 1988. Successful implementation of the Government's policy of tribal self determination will be reflected in the field of education as a continuation of this trend. Contracting has thus far proceeded largely school by school, but tribes may want to examine the prospect of contracting for the tribal management of all Bureau-funded schools on a reservation. The Federal Government may want to adopt a formal policy announcing support in principle for this step.

Public Law 93-638 and Public Law 95-561 mandate that the Bureau of Indian Affairs facilitate tribal contracting and control of education programs, depending upon the request of the tribe. The Office of Indian Education Programs may need to assert itself further in this role, as specified in the cited laws, in order to encourage the process

of expanding Indian control over Indian education while maintaining a quality program. While promoting tribal self-determination, it is also important that tribal schools remain accountable for the performance of their students. Where tribal schools are experiencing difficulties, assistance in diagnosing and remedying any problems should be made available.

Proposed Goal 9: Encourage Tribes to Explore the Financial Benefits and Feasibility of Tribally Managed Public School Districts on Reservations

For some tribes the largest total funding for reservation schools may well be obtained by setting up predominantly Indian-attended public schools on a reservation and operating these schools as a new public school district. Such a district would combine substantial Federal funds already now available for Indian students in public schools with substantial state funds similarly now available to any school district within the state. By combining Federal and state funds, the total may significantly exceed the level of funds that would be available to a tribal contract school funded primarily by BIA.

Proposed Goal 10: Establish a Process for Making School Facilities Decisions that Develops Estimates of the Full Educational and Financial Impacts of Alternative Facilities Arrangements

Facilities decisions are in many cases the instrument for implementing broader educational priorities. Yet, current facilities decisions are made largely in an ad hoc fashion. The formal criteria for setting the priority of new school construction projects and facilities improvement and repair projects leave out key education and local tribal community factors that in practice must and do enter into such decisions. Facilities decisions should be made with as accurate an understanding as is feasible of the educational and financial impacts of alternative facilities arrangements.

It may be useful to develop a computer model for estimating the educational and financial impacts of alternative facilities arrangements. Such a model was partially developed for the Chinle Agency as part of a demonstration project. This model, or a revised version, may be appropriate for extension to other BIA Agencies or school systems. New formal procedures are needed in order to ensure that a full range of facility alternatives receives consideration and that estimates are developed of the educational and cost impacts of these alternatives.

Proposed Goal 11: Begin to take Steps to Extend BIA Educational Efforts to Include Preschool Children, Outreach Programs for Child Health and Nutrition, and Outreach Programs to Instruct Parents in Helping their Children in School

Education research of the past decade has emphasized that schools are only one part of a broader set of significant influences on the learning of children. At the time they enter kindergarten, many children already are lacking in attitudes and skills needed to do well in school. In later school years, the maintenance of good health and nutrition, as well as the strong support and encouragement of parents, may be critical factors in student performance in school.

In the past there has been a tendency among educators to take the nonschool educational influences as beyond their proper responsibility. However, given the critical importance of these influences, especially for many minority children, the schools are now beginning to involve themselves in the broader environment for student learning. The long run success of BIA educational efforts may depend on adequate preparation for children prior to entering kindergarten, on the maintenance of good health and nutrition of students, and on the direct assisting of parents in playing a stronger supporting role in the education of their children. Longitudinal studies have shown that preschool programs are effective and help students make the transition from the home to the school environment with the long-term result of higher academic performance during their elementary and secondary school years (compared to students who did not attend preschool). Any preschool programs should be coordinated closely with Head Start and other available Federal programs in order to avoid duplication.

Proposed Goal 12: Encourage BIA Schools to Emphasize the Teaching of Basic Knowledge and Skills Necessary for Future Employability and Reservation Economic Development, as Well as the Opportunity for Full Participation in Modern Life

Indian reservations typically suffer from severe unemployment, due to lack of economic development. The future economic growth of reservations will depend on the education of the next generation in the basic knowledge and skills necessary to create and manage successful businesses as well as to provide a capable and stable work force. Such basic knowledge and skills--including reading, writing, language arts, mathematics, history, geography, and other social studies--are also the means to obtaining access to books and magazines, the ability to communicate effectively with others over long distances, to manage tribal organizations, and, generally, the opportunity for full individual participation in modern society.

Proposed Goal 13: Encourage BIA Schools to Give Greater Emphasis in their Curricula to Tribal History, Government, Laws, and Cultural Heritage

Successful economic development of reservations will depend on the achievement of stable tribal political and legal institutions. The self-esteem of BIA students may be enhanced by formal recognition in school curricula of the importance of tribal history and cultural heritage. These subjects will be of particular intrinsic interest to many Indian students, possibly motivating them to greater learning efforts in all areas.

In addition to new curriculum offerings, BIA education could support study of tribal culture and institutions in a variety of other ways. The BIA could support the development of textbook materials for Indian children, or could sponsor efforts in particular schools to develop such materials for broader distribution throughout the system of BIA education. Lecturers in Indian history and culture could be encouraged to visit BIA schools. Indian elders can share insights in traditions and living successfully as an Indian in a modern, changing world. Innovative video and other technology might be used as an instructional tool by teachers to expose their students to common elements of the Indian heritage and experience.

Proposed Goal 14: Establish a Program for Identifying Particularly Successful BIA-Funded Schools, Teachers, OIEP Administrators and Instructional Programs, in Order that the Basis for this Success May Be Communicated Throughout the BIA-Funded School System

Formal identification of successful efforts in BIA-funded education would serve two main purposes. Most important, it would help to provide role models and inspirational examples for others to adopt the same successful methods and approaches. It is also appropriate that successful school administrators, teachers, and OIEP staff should be given public recognition and credit for their accomplishments as one part of the reward for their efforts.

Proposed Goal 15: Improve the Data Gathering, Reporting Procedures, and Knowledge Base for the Various Schools and Programs within BIA Education

Effective management of a school system is impossible without knowing what is occurring within that system. BIA schools need greater freedom from bureaucratic controls, paperwork burdens, and central rules and regulations. Yet, the price for greater freedom is greater accountability for results, which depends on accurate data on test scores, dropouts, personnel turnover, recruiting needs and a number of other matters. At present OIEP information capabilities are limited. The task of producing an

annual report to Congress has proven a major strain on available resources. One part of the solution may be the creation of an office or center of education policy, research, and program analysis within OIEP and under the supervision of the Director of OIEP. Such an office might be able to collaborate with major universities (especially those located near high concentrations of BIA schools) which may also be willing to provide office and other support services as part of a cooperative working relationship with the BIA school system.

In this Final Review Draft, these goals are offered as proposed goals. Depending on tribal, school board, and other public reaction, these proposed goals may be finalized, rejected, and/or other final goals adopted. The finalized goals of the Office of Indian Education Programs will be included in the Final Report.

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N E W S R E L E A S E

Washington, DC: Misleading information in the recently released Bureau of Indian Affairs (BIA), "Report on BIA Education: Excellence in Indian Education Through the Effective School Process" was noted by the National Advisory Council on Indian Education (NACIE) at a recent Council meeting. The Congressionally mandated Council of American Indians, appointed by the President, met in Albuquerque, New Mexico on June 1-3, 1988.

The BIA report, released in May, stated that students in the Indian education system score significantly lower on standardized tests than other, non-Indian students. Indian student test scores, however, included Special Education students while non-Indian student test scores did not. "Such comparison of the scores is not a fair assessment of Indian student achievement," said Robert Chiago, NACIE Executive Committee Member, "That's like trying to compare apples and oranges."

The BIA acknowledged the student test score computing errors in their Final Draft Report and have given assurances that the figures will be corrected in a final, revised edition. Nonetheless, it is a concern of NACIE that the first press accounts of the report have created a negative impression of Indian education. "We just want the students, their parents and teachers in the Bureau system to know that NACIE is proud of their efforts ... that there are many success stories out there, " stated Council Chairman Buck Martin.

As evidence, NACIE activities during its meeting included a banquet and awards ceremony at the All Indian Pueblo Cultural Center. Schools honored by NACIE for outstanding achievement were the Cherokee School, North Carolina,

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Dzilth-na-o-dith-hie Community School and the Santa Fe Indian School, New Mexico. These schools were honored for having been awarded the U.S. Department of Education's "National School Award."

The Bureau is currently compiling comments on the report from Indian educators and parents around the country. Hearings on the report are planned for Aberdeen, South Dakota on July 13 at the Ramkota Inn, 1400 8th Ave., N.W. (605/229-4040) and Eagan, Minnesota on July 15 at the Residence Inn, 3040 Eagandale Place (612/688-0365).

The Council feels that it is very important to state the correct progress of Indian education. Omar Lane, NACIE Executive Committee Member, pointed out, "This is the kind of inaccurate information that helped to precipitate the recent statements regarding the state of American Indians in this country that were made by President Reagan during his trip to Moscow. Certainly, if the President and the public do not have accurate data on Indian affairs, it is impossible for them to fully understand our situation."

The draft report on the Bureau of Indian Affairs' education program is the first since the Kennedy Report of 1969, "Indian Education: A National Tragedy - A National Challenge." As such, it is likely to become a major source of information for future Indian education planning.

The Council stressed the importance of Indian community participation in the review and discussion of the Bureau report. Gloria Duus, Acting Executive Director of NACIE, remarked that, "I only wish that somehow the public knew the important and far-reaching changes being made in Indian education. NACIE is very proud of this progress."

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NACIE is mandated by Congress to advise the U.S. President, the Secretary of Education and the U.S. Congress on all issues concerning Indian education.